

City of
Somerville

DOESN'T IT MAKE SENSE TO GIVE YOURSELF AND YOUR FAMILY THE BEST HEALTH CARE

Now you can by joining the Tufts Associated Health Plan (TAHP).

With TAHP you get the finest care.

We emphasize good health through preventive care. Health insurance plans only pay the bill when you're sick. We take care of your health all the time.

When you join TAHP, you choose your own "Family Doctor" from physicians in private practice. You don't have to go to clinics or emergency rooms to be taken care of. Instead, you have regular office visits to your doctor, and you have someone to call in an emergency. TAHP physicians all have staff appointments at hospitals affiliated with the prestigious Tufts University School of Medicine. So you are assured of the highest standards of care.

With TAHP, practically all of your health care needs are covered.

Periodic health exams, tests and immunizations, as well as hospitalization and emergency care, are included. We even cover prescription drugs. Also, if you are traveling away from home, you're covered. And, you don't have to give up the quality and attention of a personal physician to get the extra coverage provided by the Tufts Associated Health Plan.

TAHP can save you money.

While the monthly premium costs are about the same for TAHP and Blue Cross/Blue Shield, TAHP can save you hundreds of dollars each year. TAHP saves you money by eliminating the deductibles and extra out-of-pocket costs for doctor visits. This can mean extra savings of as much as \$250 per year for an individual and \$600 for a family.

As you can see, the Tufts Associated Health Plan can improve the quality and coverage of your health care, while saving you money at the same time.

How you protect your family's health is a very important decision. We want to help make that decision easier for you. To join TAHP, simply fill out the enclosed application and give it to the Treasurer's Office at City Hall. The deadline in September 28th. Join now, you won't have the opportunity again until September, 1984.

Give yourself and your family the best health care you can. Join TAHP,
doesn't it make sense?

Sincerely,

Judith Wessells
Account Executive

JW/db

P.S. We want to help. If you have any questions, please call me at
969-9507 or visit me:

September 7th	8:15 - 9:00 A.M.	Central Fire Station Training Room
September 7th	2:00 - 4:00 P.M.	High School Cafeteria
September 8th	11:00 - 2:00 P.M.	City Hall - Board of Alderman Chamber
September 8th	2:30 - 4:30 P.M.	Department of Public Works
September 9th	3:00 - 4:30 P.M.	Police Department Guard Room

Tufts Associated Health Plan (TAHP) Benefits
VS
Blue Cross/Blue Shield Major Medical Benefits

With TAHP you are assured of the finest medical care. You choose your own personal physician. Every one of the TAHP doctors is a staff member of one of the teaching hospitals of the prestigious Tufts Medical School. You select your personal physician and visit him in his office. With over 450 doctors conveniently located throughout the greater Boston area you are assured of quality care near your home.

COMPARE THE BENEFITS

- o With TAHP you pay no deductible
- o With TAHP there are virtually no other charges
- o TAHP has no claim forms
- o TAHP has no waiting periods

- o With BC/BS you pay up to \$100/yr
- o With BC/BS a family could pay up to \$500/yr in extra charges
- o You must fill out claim forms
- o BC/BS requires 8 month waiting period for certain conditions

TAHP

BC/BS

PHYSICIAN'S SERVICES

Physical Exams	No charge
New Baby Care	No charge
X-Rays and Lab	No charge

You pay 100%
You pay 100%
Covered only if related to diagnosis

MATERNITY CARE

Pre & Post-Natal Visits	No charge
Delivery Charges	No charge
Hospital Charges	No charge

No charge
No charge
No charge

SPECIALIST SERVICES

Allergy Tests & Injections	No charge
Routine Eye Exams	No charge after \$5 co-payment
Surgery	No charge
Consultations	No charge
Oral Surgery	No charge for limited conditions

You pay 20% of all costs
You pay 100%
No charge
You pay 20% of all costs
No charge for limited conditions

HOSPITALIZATION

Semi-private Room & Board	No charge
Intensive Care	No charge
Private Room	No charge if medically necessary

No charge
No charge
You pay 100% over semi-private rate

	<u>TAHP</u>	<u>BC/BS</u>
EMERGENCY CARE		
Physician's Office	No charge	No charge
Emergency Room	No charge after \$10 co-payment	No charge
Emergency Care Away From Home	No charge after \$10 co-payment	No charge
PRESCRIPTION DRUGS	\$3.00 per prescription. Fillable at CVS Pharmacies.	You pay 20% of all costs
MENTAL HEALTH		
Outpatient	No charge for 1st 8 visits You pay no more than \$25 per visit for visits 9-20	Covered for up to \$500 per calendar year
Inpatient	No charge for unlimited days in a general hospital - 60 days in a mental hos- pital	Covered for 120 days in a year
OTHER COVERED SERVICES		
Skilled Nursing Facility	No charge	You pay all costs over \$4,000 per year
Private Duty Nursing	No charge	You pay all costs over \$4,000 per year
Home Health Care	No charge	100% covered only upon discharge from hospital
Medical Appliances	No charge up to \$1,500/yr	You pay 20% of all costs



Tufts Associated Health Plan
221 Washington Street
Newton Corner, Massachusetts 02158

MEMBERSHIP APPLICATION

Please type or print
Do not write in shaded areas

Employee Name			Marital Status		Social Security Number
Last	First	MI	☐ Single ☐ Married ☐ Separated ☐ Widowed ☐ Divorced		— —
Home Address		Telephone #	Name of Employer or Group		Date of Employment
No.	Street	()			
City		State	Type of Coverage I wish to apply for: ☐ Single ☐ Family ☐ Other		Eff. Coverage Date
Zip					
Have you or your spouse ever been a member of the Tufts Associated Health Plan?			Is spouse employed?		If yes, name of employer
☐ YES ☐ NO			☐ YES ☐ NO		Group #
					Ben. Lev.
Do you or another family member have health coverage through another group or employer?			If yes, name of policy holder		Name of Insurance Company
☐ YES ☐ NO					

Family members to be covered			If dependent child is over 19,				If you currently use this physician,		PCP #	DC
First	MI	Last (if different from employee)	Sex M F	Date of Birth Month Day Year			Choice of TAHF Primary Care Physician			
Employee			☐	☐	/	/			☐	01
Spouse			☐	☐	/	/			☐	02
Child			☐	☐	/	/	☐	☐	☐	
Child			☐	☐	/	/	☐	☐	☐	
Child			☐	☐	/	/	☐	☐	☐	
Child			☐	☐	/	/	☐	☐	☐	
Child			☐	☐	/	/	☐	☐	☐	

Please check if you are using additional enrollment forms for dependent children ☐

I hereby authorize my employer to make necessary payroll deductions for my share of TAHF coverage. I understand that all health services must be obtained or authorized through TAHF physicians or personnel. I understand that the benefits for which I (we) will be eligible are those described in the evidence of coverage.

Signature

WHITE : TAHF CANARY : SUBSCRIBER PINK : EMPLOYER

Date

The Tufts Associated Health Plan (TAHP) is a medical plan designed to provide comprehensive health benefits, for a prepaid subscription fee, to eligible employer groups throughout greater Boston. TAHP features a network of seven Individual Practice Association (IPAs), each drawn from the active medical staff of a hospital affiliated with the renowned Tufts University School of Medicine. TAHP's participating hospitals and their IPAs include:

- Carney Hospital, Boston
- Emerson Hospital, Concord
- Faulkner Hospital, Boston
- Lawrence Memorial Hospital of Medford
- New England Medical Center, Boston
- Newton-Wellesley Hospital, Newton
- St. Elizabeth's Hospital, Boston
- St. Margaret's Hospital, Boston

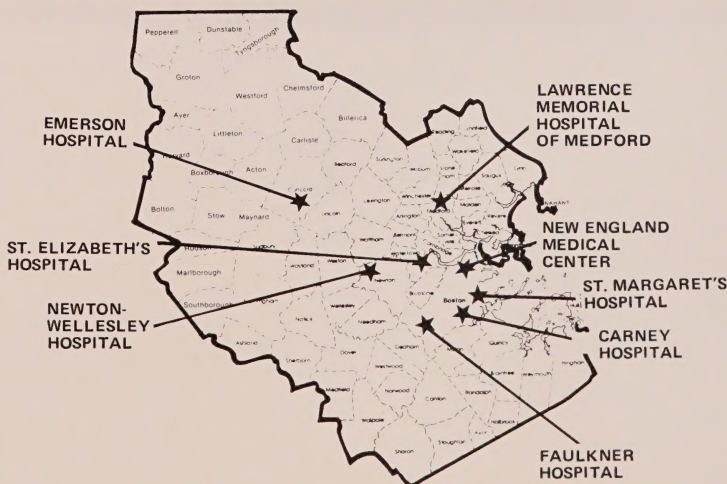
TAHP offers you comprehensive care — conveniently close to your home or work place. Our physicians practice throughout the communities served by our participating Tufts affiliated hospitals. When you choose a TAHP physician you're assured of personal care.

Our physicians practice in communities close to you. They understand that, sick or well, you want personal medical care. You'll receive most of your care in your TAHP's physician's private office. Our participating hospitals know the value of personal care, too. They have been serving your community for many years, bringing outstanding care close to you.

As a member of TAHP, you'll select a personal care physician who will assume responsibility for managing your care, through both primary and referred specialty services, as well as hospitalization. The member's selection may be made from any IPA panel — these include internists, pediatricians, family practitioners and obstetrician/gynecologists. Each member of your family may choose from different IPA panels; if you already have a personal care physician, you may find his or her name among the TAHP participants.

The TAHP service area includes the following cities and towns:

Acton	Groton	Reading
Arlington	Harvard	Revere
Ashland	Hingham	Saugus
Avon	Holbrook	Sharon
Ayer	Hudson	Sherborn
Bedford	Hull	Somerville
Belmont	Lexington	Southborough
Billerica	Lincoln	Stoneham
Bolton	Littleton	Stoughton
Boston	Lynn	Stow
Boxborough	Lynnfield	Sudbury
Braintree	Malden	Tyngsborough
Brookline	Marlborough	Wakefield
Burlington	Maynard	Walpole
Cambridge	Medfield	Waltham
Canton	Medford	Watertown
Carlisle	Melrose	Wayland
Chelmsford	Milton	Wellesley
Chelsea	Nahant	Westwood
Concord	Natick	Westford
Dedham	Needham	Weston
Dover	Newton	Weymouth
Dunstable	Norwood	Winchester
Everett	Pepperell	Winthrop
Framingham	Quincy	Woburn
	Randolph	



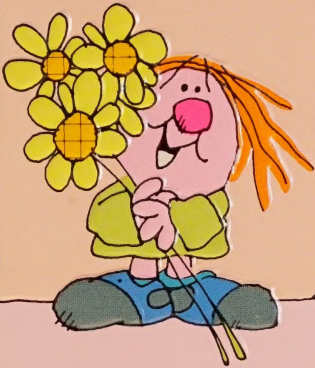
TAHP BENEFIT SUMMARY

This chart summarizes the services offered. TAHP's Evidence of Coverage defines the terms and conditions of this benefit package including exclusions in greater detail. Your personal care physician is the key to effective use of TAHP coverage. All benefits, including maternity, are available immediately with no waiting periods.

SERVICES*	TAHP COVERS	COST
Physician's Services (Ambulatory)	Doctors' office visits — including periodic pediatric check-ups, specialists' services, health evaluation, prenatal and postnatal care	100% covered (no cost)
	Laboratory and X-ray examinations, injections and immunizations, allergy tests, casts and dressings	100% covered (no cost)
	Professional counseling (family planning, infertility, nutritional, medical, social services and health education)	100% covered (no cost)
	Diagnosis, required medical treatment and referral services, for the abuse of or addiction to alcohol and drugs, detoxification	100% covered (no cost)
	Physical, occupational and speech therapy	100% covered (no cost)
Emergency Care* • in the service area	Authorized emergency care 24 hours a day, 7 days a week: In a physician's office	100% covered (no cost)
	In the hospital emergency room	\$10 per visit when approved by TAHP. (100% covered if care results in admission)
	In an inpatient facility	100% covered (no cost)
	Authorized emergency care, available until condition permits travel to a Plan associated facility	Same coverage as above
Hospital Inpatient Care • Medical • Surgical • Pediatric • Maternity • Psychiatric • Detoxification	Physicians' and surgeons' services, including regular visits, consultations and operations when authorized by your personal care physician	100% covered (no cost)
	Unlimited room and board in semi-private accommodation (private accommodations when medically necessary)	100% covered (no cost)
	General nursing care (private when medically necessary)	100% covered (no cost)
	All physicians' and hospital services (for mother and child) during confinement	100% covered (no cost)
	Special diet when prescribed	100% covered (no cost)
	Use of operating and recovery rooms, special care units (intensive, coronary, etc.)	100% covered (no cost)
	Drugs, medications, biologicals	100% covered (no cost)
Hospital Inpatient and Outpatient Care	X-ray, laboratory and other diagnostic tests	100% covered (no cost)
	Physical, radiation and inhalation therapy	100% covered (no cost)
	Administration of whole blood or plasma	100% covered (no cost)
Mental Health Care • Outpatient	Physician's office for the first 8 visits in each calendar year 9th-20th visit in each calendar year	100% covered (no cost) Member pays lower of \$25 or 50% of charge
	• Inpatient	Up to 60 days per calendar year in a mental hospital 100% covered (no cost)
Vision Care	Comprehensive eye exam for prescribing eyeglasses	\$5 for each exam
	Comprehensive evaluation and treatment for medical conditions	100% covered (no cost)
Skilled Nursing Care	100 days of skilled nursing care and services in a skilled nursing facility (in semi-private accommodations) and physician's services	100% up to a total of 100 days in each calendar year
Home Health Care	Physician's house calls when deemed necessary by your personal care physician	100% covered (no cost)
	Home visits by nursing personnel and other home health services when prescribed	100% covered (no cost)
Other Services	Appliances, ambulance, dental, up to certain limits or only for specified procedures (see evidence of coverage for details)	100% covered (no cost)

*All services must be provided by or arranged through TAHP personal care physicians except in acute emergency when member's life is jeopardized or when an emergency occurs outside the Service Area.

THIS IS YOUR
MOTHER'S DAY
CARD.





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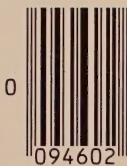
SORTA MAKES IT ALL
WORTHWHILE, DOESN'T IT? 

HAPPY MOTHER'S DAY! 


— Missy

Ambassador

Contemporary
Cards





Merchant Marine and

- Engineering
- Science
- Transportation

State University of New York

MARITIME COLLEGE

College and Career Viewbook



Location

The Maritime College, located at historic Fort Schuyler on Throgs Neck in a residential area of the Bronx, is easily accessible by car from all directions and is a 20 minute taxi ride from LaGuardia Airport. Express bus service as well as city bus and subway service is available from Throgs Neck to Manhattan on a regular basis.

Purpose

This viewbook is designed as a brief introduction to the SUNY Maritime College and to the careers open to graduates. Complete information on the college and curriculums is available in the college catalog which can be obtained by contacting the Office of Admissions.

MISSION OF THE MARITIME COLLEGE

The Maritime College is a specialized College of the State University of New York dedicated to its Mission

To educate and train qualified young people to become licensed officers in the American Merchant Marine.

While licensure alone does not require a college education, it is the specialized nature of the Maritime College

To provide a sound undergraduate and graduate background by combining a nautical education with the courses of a college curriculum to prepare the cadets for successful careers in the maritime industry, afloat and ashore.

The unique combination of a fully accredited baccalaureate curriculum and the licensing professional education is conducted in a structured organization

To educate and train the cadets in leadership and to instill in them an abiding sense of honor, discipline, responsibility and mature citizenship.

The traditions of the College and the traditions of the sea service are not ends themselves, but are drawn upon

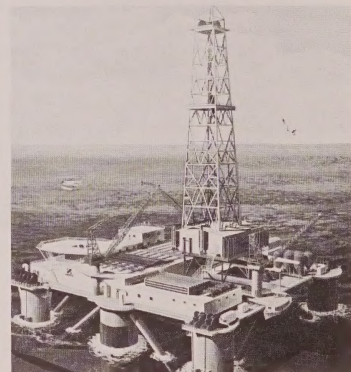
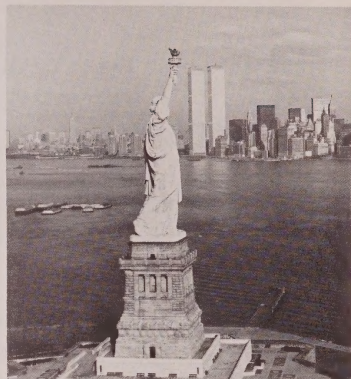
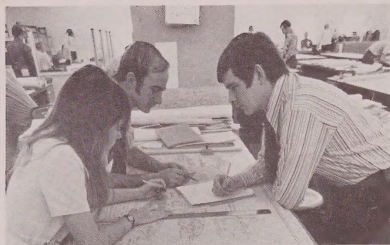
To develop in the cadets a pride in their profession, and a determination to uphold its finest traditions.

Graduates are qualified and encouraged to pursue the opportunities and personal rewards of the sea-going profession. They are prepared to become leaders in the broad industry afloat and ashore, as the College curriculums are developed

To provide a sound academic program so that graduates may take their places in the business and professional world.

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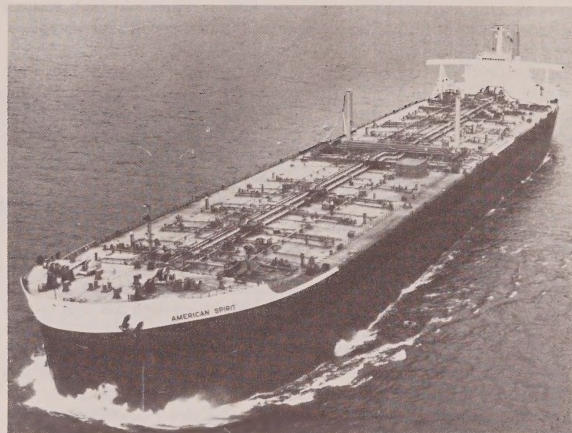


Marine Industry

The Marine Industry is one of the most dynamic and exciting industries in the world. It is an industry that for centuries has demanded professionals willing to challenge the frontiers of knowledge, who possess qualities of individualism and resourcefulness. Without men possessing these attributes, and the ships they designed, built, and operated, the history of the world and the fate of mankind would be drastically different. Without ocean transportation of the world's raw materials and finished products, modern society would not exist. The mineral, biological, and energy resources of the ocean will play increasingly important roles in the evolution of civilization. The critical role of Naval ships to peace and security throughout the world, readily seen in history, continues with expanded need for ships employing the highest technologies. The marine industry is broad and diverse.

In addition to Merchant Marine Operations described on following pages, its spectrum includes the following ashore activities:

- * Merchant Shipping Operations — including Ocean, Great Lakes, and River Transportation
- * Transportation industry management
- * Ocean research and operations
- * Ship and ocean systems design and construction
- * Naval ship design, construction, and repair
- * Design, production and service of marine equipment
- * Nuclear and fossil fuel energy systems
- * Management of all facets of the industry including ocean resources
- * Offshore oil and mineral resource recovery
- * Government Agency Administration and technical support
- * Port Administration
- * Law — Admiralty and international law of the sea
- * Insurance
- * Education and training
- * Finance
- * Regulatory activities



It is an industry that requires the talents of many professionals. The dominant disciplines in the industry are Engineering (including Naval Architecture), Business (transportation management, finance, economics), Science, and Law. It is an industry where women and members of minority groups can make significant contributions. Historically few women or American minorities have prepared for professional level careers in the marine field. Merchant Marine officers who also possess academic credentials in the above disciplines are especially valuable to the industry ashore.

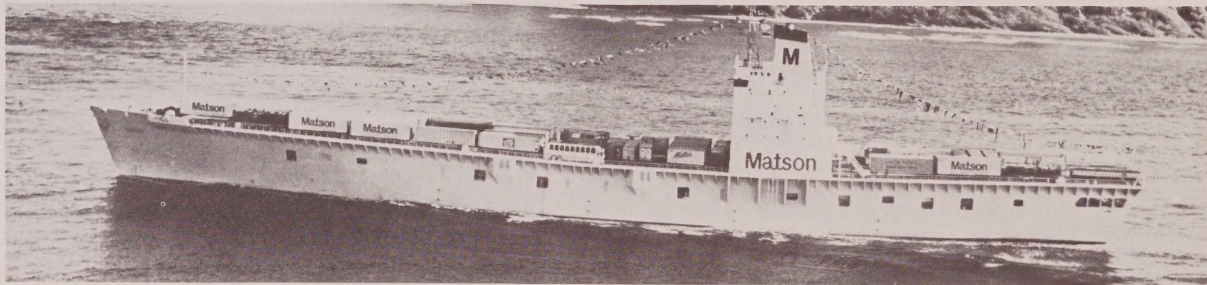
It is in both the traditional facets of the marine industry and the frontier areas of ocean work where Maritime graduates play key roles. As Merchant Marine officers, they have the credentials and training of professional seafarers, with an understanding of and appreciation for the factors, natural and human, which have bearing on survival and success.

As educated citizens they are well prepared through general education and through degree studies in engineering, management, or science disciplines which can be applied to the challenges of life. The combination of general education with license preparation makes graduates especially valuable to those activities related to the marine industry. In addition to the technological and scientific problems, extensive international, legal, political, and economic hurdles must be addressed if the needs of mankind are to be served.

For Those Who Follow The Sea . . .

The license as a Merchant Marine officer for ships of unlimited tonnage/horsepower permits access to the full spectrum of civilian sea going work.

The licensed work aboard ship is divided between Deck and Engine departments. The Deck department is responsible for navigation, maintenance of hull and deck equipment, and the supervision of loading, stowage, and discharging of cargo. The senior deck officer is the Master or Captain. Engine department personnel operate and maintain the ship's propulsion machinery and all ancillary equipment aboard ship, including cargo handling machinery and control systems. Engineers ensure that the ship is capable of doing all that it was designed to accomplish. The senior engineering officer is the Chief Engineer.



The Merchant Marine

The Merchant Marine consists of privately owned ships which carry our nations commerce, conduct research, etc. It plays a vital role not only to our economy but also to our national defense. Were it not for Merchant Mariners and civilian sea lift we probably would have fought part of World War II in North America. . .

Sailing can be a richly rewarding career. The Merchant Marine officer can take pride in being in a key position of responsibility in an industry that is essential to our well-being as a country and to the welfare of the world. It is employment which involves teamwork, self-discipline, and mature judgement.

Merchant Marine officers are licensed professionals who must carry extraordinary responsibilities and they are rewarded accordingly. Ships operate 24 hours a day, 7 days a week. Crew members normally stand two 4 hour watches in each 24 hour period and generally spend a few additional hours each day doing necessary ship's work on an overtime basis. While on watch, the officer is responsible for the safe operation of the ship. Officers typically sail for 6-8 months each year. The remaining time is vacation when others have responsibility for the ship (quite unlike work ashore where office burdens often follow the executive home and on vacation).

While the nature of seafaring is changing due to increased productivity of new technology ships, some elements remain common to all. Man and machine against the elements, teamwork, independence, adventure, responsibility, getting to know people from other parts of the world — these are shared by seamen of all nations and as a result there are bonds which go beyond political doctrine, religion, or philosophical beliefs. It is worthy of note that an estimated 85% of all seafarers are family men.

The financial rewards of seafaring are appropriate to the responsibilities involved. In 1983 salaries for Third Mates and Third Assistant Engineers sailing unlimited oceans full time range from approximately \$33-\$48,000 for a six-eight month year, including overtime. Salaries are dependent on horsepower/tonnage/cargo/

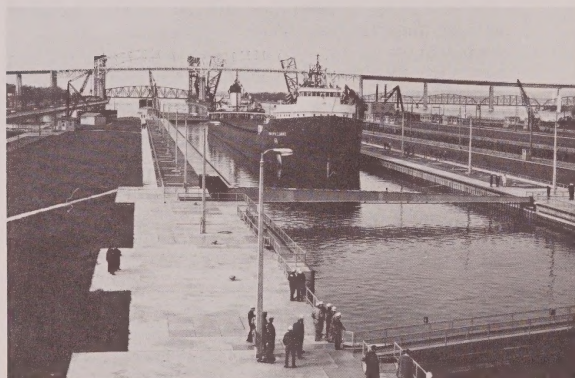
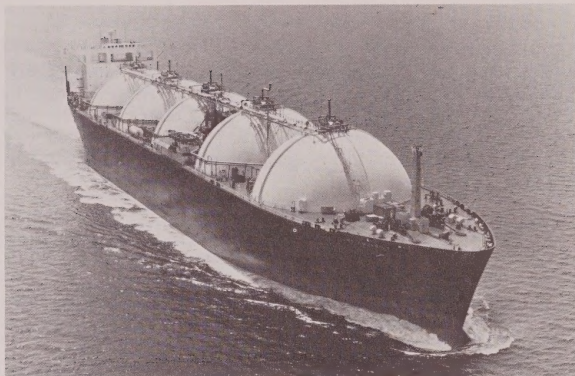
seatetime. Captains and Chief Engineers can earn as much as \$95-\$100,000 for equivalent seatetime although the average is closer to \$70-\$75,000. Tugs, dredges, workboats, etc., offer a different lifestyle with a different salary scale (estimated average \$28,000 with Masters and Chief Engineers ranging from approximately \$50-\$60,000).

Merchant Marine Activities

- World Trade — tankers, general cargo ships, container ships, bulk carriers, lash, etc.
- Coastwise Trade — Principally tankers, container/RoRo (roll-on-roll-off) ships, and tow boat/barges
- Great Lakes — bulk and ore carriers
- Rivers — tow boat/barge operations
- Piloting — harbor, river, Great Lakes, canal, and bay pilots who maneuver vessels in restricted waters, including docking/undocking operations
- Research ship operations
- Offshore industry drill ships, supply craft, exploration and mining ships
- Military Sealift Command — civilian manned research ships, military cargo ships, and tankers owned by the Department of the Navy
- Army Corps of Engineers — civilian manned dredges and special purpose vessels used in survey and harbor channel improvement operations

Marine Related Federal Service Activities

Service as an officer with the Navy is an option selected by many graduates. Many serve as reserve officers on active duty for a nominal period of three years. A significant percentage follow full careers as Regular officers, including some who have achieved Flag rank.



Maritime graduates also pursue careers in the Commissioned Corps of the National Oceanic and Atmospheric Administration (NOAA), an agency which organizes and conducts research operations for the federal government often in conjunction with private institutes.

Many graduates pursue careers as officers with the U.S. Coast Guard — most commonly in the Marine Inspection Division which is concerned with ship safety, and personnel certification.

How Do I Become A Captain or Chief Engineer?

The procedure for upgrading from Third Mate to Master and Third Assistant to Chief Engineer follows a regular progression. As the licensing authority for the Merchant Marine, the Coast Guard establishes criteria and administers upgrading examinations. Prerequisite to sitting for the next license exam is establishment of eligibility based on "sea time." In order to be eligible to sit for the Second Mate or Second Assistant exam the Third Officer must have completed at least one year of sea time. Upgrading to Chief Mate or First Assistant requires one additional year of sea time. Upgrading to Master or Chief Engineer takes one to two additional years of sea time. With many officers sailing six months/year it now typically takes 6-8 years to have sufficient sea time to be eligible for the senior license. Sea time can be acquired at a faster rate by sailing as a civilian officer with the Military Sealift Command (MSC), an agency which allows more sea time than can be obtained in most commercial operations.

For those deck officers who like maneuvering ships in tight places and who want to stay close to home, becoming a pilot (river, bay, harbor, or lake) can be a true challenge. Pilots must possess seaman's sense, confidence, and presence as they are called upon to operate ships in restricted waters where regular ship's officers do not have the necessary local knowledge to maneuver their ship safely. As pilots must assume responsibility for the many ships they bring through their geographic area under sometimes adverse conditions, they must possess the capacity to cope with extraordinary responsibility.



Overview

The State University of New York Maritime College at Fort Schuyler has been a leader in maritime education and training since its inception in 1874. Starting with a two year "schoolship" curriculum conceived by Stephen B. Luce (later an Admiral and considered the foremost Naval educator of the time) the curriculum has evolved into fully accredited baccalaureate degree studies in nine distinct academic majors. Curriculums are broad enough to meet the changing needs of society while focusing on areas of particular interest and value to the marine industry. This is accomplished concurrent with preparation for licensure as either a Third Mate — oceans unlimited or Third Assistant Engineer — unlimited horsepower (steam and motor.)

The dual nature of the program is extremely demanding on students but results in particularly well qualified personnel for all facets of the marine industry. Graduates are fortunate to have many options open — particularly ones which allow full participation in the marine industry even during the periods of "tight shipping" which sometimes occur.

The 925 Cadets enrolled during the 1982-83 academic year came from 23 different states and 18 countries. Academically they are well prepared and capable students willing to put a lot of work into their education. The enrollment of women and American students of minority descent is strongly encouraged, and increasing. The Maritime College became coeducational in 1972 and admitted its first women as cadets in 1974.

The college moved to its 56 acre Fort Schuyler campus in 1938 after renovation of the original Fort building by the WPA. The fort was constructed in the 1830's and is considered to be the finest example of a Napoleonic shore defense installation in the Western Hemisphere. College dormitories, science and engineering building, physical education facility, and the student activities building/boathouse were all completed after 1960.





Maritime College

The Maritime College is organized as an academy where men and women cadets prepare for licensure as officers for the Merchant Marine while they earn bachelor's degrees in business, engineering, or science. SUNY Maritime College is the only maritime academy in the United States to offer multiple engineering degree programs that are ABET accredited, and Professional Engineer (PE) license registered. The professional license as either a deck or engineering officer for the Merchant Marine gives graduates access to the full spectrum of civilian seagoing employment. Graduates of all curriculums are fully prepared for rewarding careers ashore as well as at sea because of their academic preparation. Navy ROTC with its scholarship program is available to cadets seeking active duty as officers in the Navy at graduation. Graduates are eligible for commissions as officers in the Navy and Coast Guard Reserve and the Commissioned Corps of the National Oceanic and Atmospheric Administration (NOAA)

An integral part of all Maritime curriculums is the annual Summer Sea Term aboard the college training ship EMPIRE STATE. It is during the training cruises to foreign and domestic ports each summer that cadets obtain the necessary practical experience to be eligible to sit for the Coast Guard-administered license examinations during the senior year. To help offset the added expense of a maritime education, all cadets who are U.S. citizens and qualified for both the Merchant Marine license and for Midshipman status in the Navy Reserve are eligible for a federal incentive payment of \$1200/year paid by the Maritime Administration. The full range of financial aid programs that are based on need are also available.

The placement record of the Maritime College is enviable. The options inherent in multiple educational and professional credentials give graduates welcome flexibility to pursue rewarding careers at sea or ashore even in uncertain economic times. Those cadets who elect to participate in the "Federal Incentive Payment" program as explained on page 28 agree to pursue sailing in the Merchant Marine as a first priority at graduation. It is hoped that all graduates will

have the opportunity to sail on their licenses, as it is a special profession. Those who find they have "salt water in their veins" will make the sea their life.

Opportunities for employment ashore are expected to continue at traditionally strong levels. Graduates who obtain experience at sea are particularly valuable ashore in management, engineering and scientific/technical positions in the marine industry and in many other industries and activities as they have the education, experience, leadership, and other personal resources that are highly prized by employers.

Opportunities and options really are a function of the ambition and resourcefulness of the individual. All associated with the College are proud of our 100+ year tradition of providing the education and training which lays the groundwork for success. We are especially proud of the achievements of our graduates.



Student Life

Maritime College cadets lead a full life. In addition to academic responsibilities, cadets participate fully in the regimental life of the college and are encouraged to be active in student activities and sports. There are many important elements of a college education which derive from non-academic experiences.

Cadet Regiment

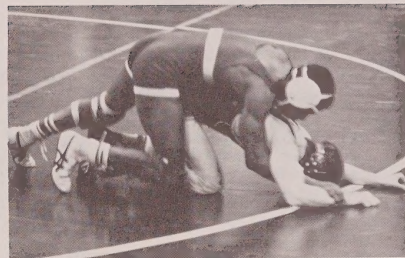
In keeping with the professional nature of the college, Maritime students are organized as a regiment of cadets. Although some graduates each year embark on military (Navy or Coast Guard) careers, the objective of the regimental system is not military — it is to prepare professionals who can assume positions of responsibility and authority in the structured environment of shipboard operations. This requires a willingness to recognize, and the self-discipline and resourcefulness to carry out major responsibilities; the self-discipline and presence to make decisions; and the ability to function both as a leader and as a member of a team. The leadership and other personal qualities developed through regimental experience and training are universal in their applications but are especially valuable in practical ship operations where responsibilities are clearly defined and the officer must rely on self-discipline and leadership. The atmosphere on most merchant ships, as a result, is generally informal but professional.

Regimental routine is designed to refine those personal qualities of self-discipline, responsibility, teamwork, and leadership through a system of increasing responsibility and privilege. First Class (senior) cadets are the regimental officers on the campus during the academic year and serve as cadet officers with supervisory and operational professional responsibilities aboard the training ship during the Summer Sea Terms.

Relatively little time during the academic year is devoted to regimental routine, however, its importance to professional development is considerable. "Mugs" (Fourth Class cadets or Freshmen) undergo ten days of rigorous Indoctrination before the



"We did this in ten days!"



start of classes. It is during this physically and emotionally demanding period when new students learn to become cadets, but more importantly start a process of personal growth. They are also introduced to the college, ships, and the Marine Industry. Indoctrination is designed to help new students adjust to the demands of the academic and professional life of the college. Cadets learn by doing and, as they gain experience at the college, assume a major role in the instruction of subordinates in professional activities both aboard the training ship and ashore.

Student Activities

Although academic and professional demands are essentially a full-time job, participation in extracurricular activity is an important part of a college education. Extracurricular activities allow for the release of physical and emotional energy. Organized activities also foster new friendships, expand interests and knowledge, provide opportunities to learn new skills or to practice leadership and organizational skills so useful in team efforts. Plus — they are fun!

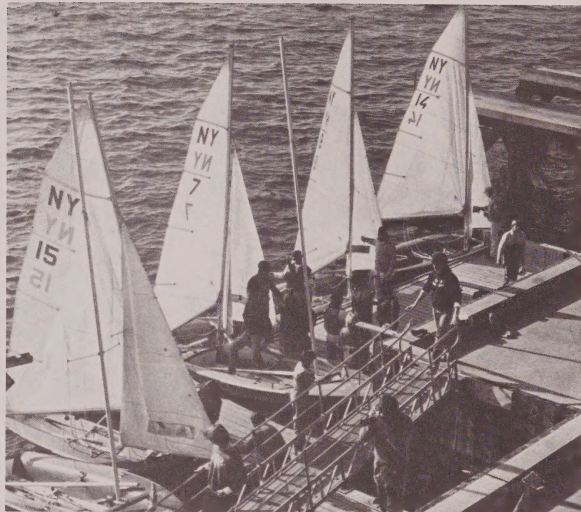
Student Clubs and Organizations

Student clubs and organizations are created as a result of cadet interest and initiative and are funded by the Student Activities Fee, proceeds of the Faculty-Student Association, gifts from the Parents' Association and Alumni Association, and student money-raising efforts.

Student Council
College Band
Porthole (college newspaper)
Eight Bells (college yearbook)
Scrimshaw (College Literary Magazine)
Afro-Caribbean Club
Auto Mechanics Club
Chess Club
Craft Club
Hellenic Club
Management Society
Photography Club
Strategy & Tactics Club
Veterans' Club
Order of the Engineer
Spanish Club
Propeller Club
Engineering Society
Glee Club
Company P-8 Pershing Rifles

Humanities Club
Astronomy Club
International Relations Club
Student American Nuclear Society
Sailing Squadron
Radio Club
Circle K Club
Steamship Historical Society of America
Dance Committee
Computer Club
Ocean Science & Technology Society
Judo Club
Eagle Scout Fraternity
Skin & Scuba Diving Club
Weight Lifting Club
IEEE Student Chapter
ASME Student Chapter
Emergency Medical Technician (EMT) Squad

A member of the class of 1980 observed: "You may feel that you don't have time to invest in an activity considering the course load you maintain. However, you will find that you will budget your time much more practically when you are involved in extracurricular programs. The time normally spent in procrastination or daydreaming is utilized in better ways when the time you have is slightly more limited. Also the time spent away from studies allows you to gain some perspective on how to complete assignments properly. If your whole world revolves around studying, your outlook on life becomes very limited and it becomes harder to deal with any problems encountered. By involving yourself in extracurricular activities, your horizons are greatly broadened."



Involvement in extracurricular activities, hobbies, and cultural events takes on added significance for the Maritime graduate. Merchant Marine officers must cope with substantial periods of vacation as well as leisure hours aboard ship where commercial diversion is not readily available. Those persons who can use their time productively truly reap the rewards of being a seafarer. The potential for contribution to community service for example, is unique, as officers have both the time and money to be able to serve others.

Participating in college activities helps cadets enrich their own lives as well as those of their associates. In contributing to college life, cadets also demonstrate their support for their school and their capacity to reach out.

Athletic Program

Athletic competition is an integral part of many students' lives. While the objective of all athletic programs is team work and friendly competition, many Maritime College students have distinguished themselves, earning recognition as All-American athletes in sailing, swimming, and wrestling.

As a small college with an unusually large number of intercollegiate teams, Maritime has few bench warmers. Students who desire to compete have the opportunity to be full members of a team.

The Maritime College is a keen competitor in intercollegiate sailing as well as yacht racing. College boats include fleets of modified 420 type dinghies, 30 foot Shields keel sloops, and 39 and 42 foot cruising class sloops BLAZE and PRIVATEER.



VARSITY SPORTS

- | | |
|-----------------|----------------|
| * Baseball | * Lacrosse |
| * Basketball | * Rifle |
| * Crew-Coed | * Sailing-Coed |
| * Crew-Women | * Soccer |
| * Cross-Country | * Swimming |
| * Fencing | * Tennis |
| * Golf | * Wrestling |

INTER-COLLEGIATE CLUB SPORTS

- | | |
|-------------|------------|
| Football | Rugby |
| Hockey | Volleyball |
| Judo/Karate | |

Women athletes compete in cross country, fencing, tennis, rifle, swimming, and sailing, and have separate crew and volleyball teams. Women also participate as managers for many of the men's teams. As more women enroll at Maritime, the number of women's teams will increase.

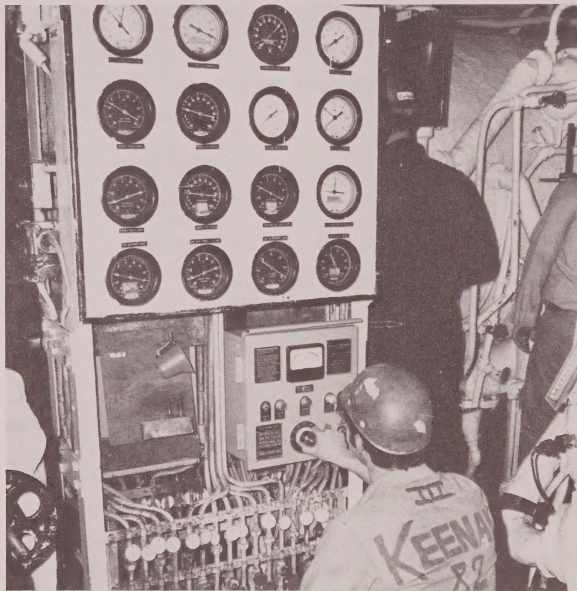
* Intramurals in twenty different sports provide many other opportunities for athletic activity, especially for those with less time or talent.



Summer Sea Term

It is during the Summer Sea Term for two months each summer that cadets obtain practical experience operating EMPIRE STATE, the college's 533 foot ship. The Coast Guard requires cadets to have at least six months of sea time in a training ship in order to be eligible to sit for the license examination during the senior year.

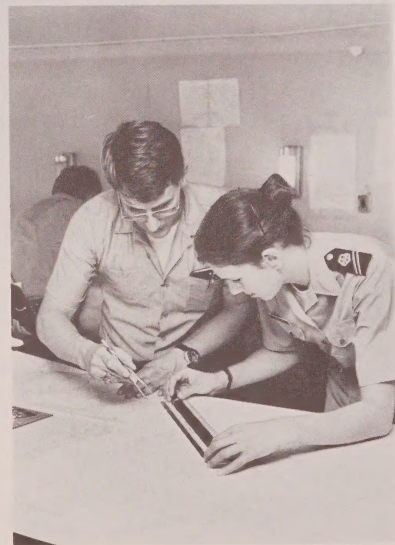
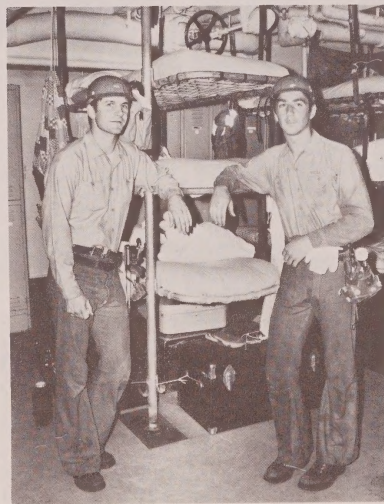
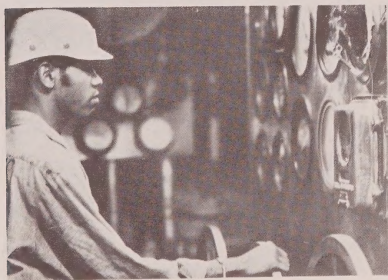
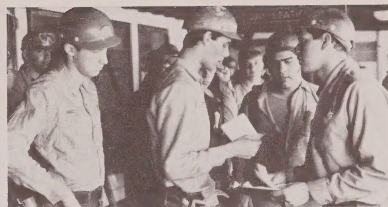
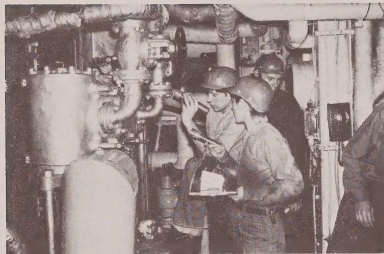
Cadets participate in all facets of the operation, maintenance,



and repair of EMPIRE STATE under the supervision of licensed watch officers and instructors. It is in this "laboratory afloat" that cadets apply classroom knowledge to actual operations in a carefully controlled system of increasing responsibility and privilege. Cruise is when all of the pieces of the Maritime experience come together. It is a leadership and professional laboratory without peer.

There are three parts to each training cycle during the SST. (The Deck department is on a three-day cycle and the Engineering department is on a six-day cycle.) One third of each cycle consists of watchstanding where cadets have responsibility for the actual operation of the ship; one third is classroom and laboratory study of ship's systems, operations, etc.; and one third is devoted to actual ship's maintenance and/or training in the maintenance and repair laboratories. Meteorology and Oceanography cadets also have opportunities to gain practical experience using ocean research and weather monitoring instrumentation.

Hard work? Yes, but when you are doing the things you enjoy, hard work has special rewards. Foreign port calls are welcome breaks for rest and relaxation and also give cadets an opportunity to appreciate other cultures and to observe other ways of doing things — some of the many rewards of following the sea.



UNDERGRADUATE PROGRAMS

DECK LICENSE MAJORS

Computer Science (BS)	p. 26
+ Electrical Engineering (BE)	p. 19
Marine Transportation Management (BS)	p. 23
Marine Transportation Economics (BS)	p. 23
Meteorology and Oceanography (BS)	p. 24
* HuSAC (BS)	p. 27

ENGINE LICENSE MAJORS

Computer Science (BS)	p. 26
+ Electrical Engineering (BE)	p. 19
+ Marine Engineering (BE)	p. 20
+ Naval Architecture (BE)	p. 21
Nuclear Science and Engineering (BE)	p. 22
* HuSAC (BS)	p. 27

* A Humanities Study Area Concentration (HuSAC) is available to cadets preparing for either the deck or engine license, beginning in the Second Class (junior) year.

+ Engineering Programs accredited by the Accrediting Board For Engineering and Technology (ABET). All engineering degree programs are recognized for Professional Engineer (PE) License purposes.

License Preparation

Cadets in degree programs which lead to the Deck Officer license include in their programs of study courses in: Navigation, Seamanship, Rules of the Road, Cargo, etc.

Cadets in degree programs which lead to the Engineering Officer license include in their programs of study courses in: Manufacturing Processes (machine shop), and Ship Systems, including propulsion, electrical, auxiliaries, etc.

Graduates of all degree programs are qualified for admission to graduate and other professional schools (most common is law). Experience has shown that most graduates seek employment in the marine industry at graduation with the majority "sailing on their license" during good economic times.

With the great flexibility of a career at sea, many graduates alternate sailing with advanced study. Many of the firms which employ Fort Schuyler graduates ashore assist in paying for part-time graduate studies.

Engineering

Engineering is defined as the profession in which knowledge of the mathematical and natural sciences, gained by study, experience, and practice, is applied to develop ways to utilize economically the materials and forces of nature.

Maritime College engineering degree programs, while having their core in traditional electrical, mechanical, and civil/structural engineering, address particularly challenging areas of technology because of the marine environment in which devices must operate.

As mankind looks to the ocean as a natural resource and as a source of energy, it will be engineers who can develop instrumentation, structures, and equipment which can operate in the marine environment who will play key roles in developing this frontier.

No other college in the country offers as wide a choice of fields of study coupled with Coast Guard license preparation. Engineering degree programs at the Maritime College are unique as cadets earn Bachelor of Engineering degrees in Electrical or Marine Engineering, Naval Architecture, or Nuclear Science and Engineering, while they prepare for licensure as engineering officers for the Merchant Marine (Electrical Engineers may opt for either the deck or engine officer's license.)

Electrical Engineering, Marine Engineering, and Naval Architecture are accredited by the Accrediting Board for Engineering and Technology (ABET). (Nuclear Science and Engineering will soon be presented for this accreditation.) Engineering degree candidates from all programs are eligible to sit for Part A of the New York State Professional Engineer (PE) license exam when within 20 semester hours of graduation.

The baccalaureate phase of the programs emphasizes engineering design and the license preparation phase emphasizes operational engineering. Thus the graduate receives the theoretical and practical preparation in engineering that is desired by all accomplished engineers. The combination is most useful. As merchant marine operating engineers, graduates have an in-depth understanding of theory which helps in trouble-shooting, system modification, etc. As

design engineers, graduates can make significant contributions because they have supplemented their design engineering education with practical operations training and experience.

Engineering curriculums provide well-balanced studies which serve as excellent bases for continuing graduate studies in engineering, science, business, or professional schools (particularly law).

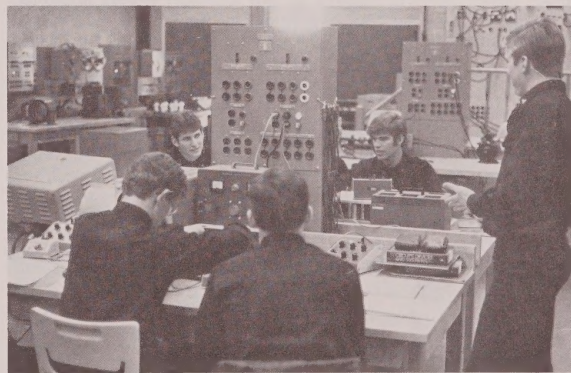
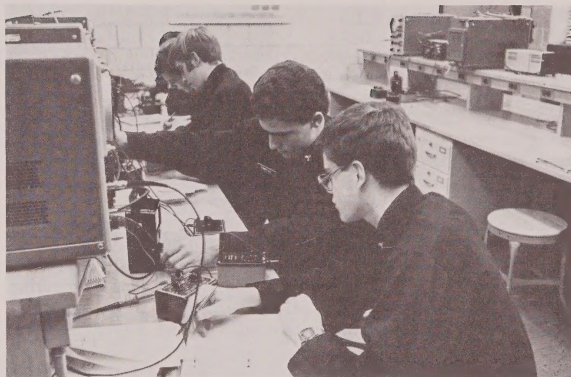


Electrical Engineering

The Bachelor of Engineering degree in Electrical Engineering is available to cadets preparing for either the deck or engine officer license. While the academic core for both electrical engineering degree programs is essentially the same, the license preparation is quite different. Deck license candidates augment their electrical engineering studies with the study of navigation, nautical science, and communications, while the engine license candidates augment their electrical engineering studies with the study of thermal energy conversion devices such as diesel, gas turbine, and steam turbine power plants, and electrical power systems and electronic controls.

Many courses are common to both electrical engineering majors during the last two years of the curriculums; however, the deck license candidate devotes more attention to the study of electronics, including special course work in marine electronics systems. The graduate of this program is particularly valuable in the marine electronics industry which deals with communication systems; ship control, collision avoidance, and navigation systems; acoustic systems, etc. The electrical engineering graduate sailing as a deck officer can also function as an electronics officer aboard commercial, naval, or research ships. Students in this curriculum are encouraged to prepare for the FCC Second Class Radiotelegrapher's license.

The engine license candidate with the electrical engineering major spends relatively more time during the last two years in the study of power systems, electrical machinery, and electronic controls. In addition to sailing on their licenses as engineering officers, graduates of this power-oriented curriculum are particularly useful to all sectors of the marine field and to the energy industry. Electrical devices and machinery are key elements in the rapidly expanding technology needed in marine activities.

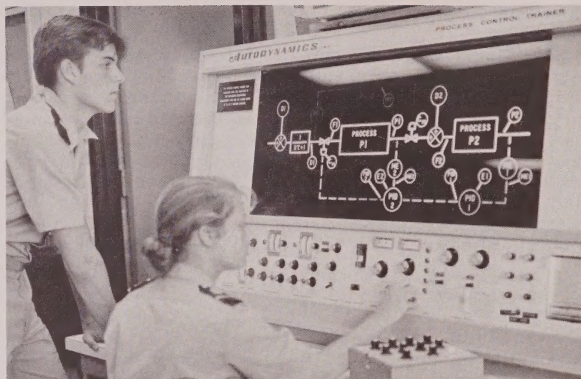


Marine Engineering

Marine Engineering is often referred to as “salty” mechanical engineering. There are two facets to marine engineering: 1) the operation, maintenance, and repair of marine propulsion and power systems and other machinery aboard ship—the primary work of the merchant marine engineering officer—and 2) mechanical engineering applied to the design of systems and devices which can operate in the marine environment such as energy conversion systems, power plants, cargo systems, life support systems for deep submergence operations, and shipboard machinery. Devices which operate in the marine environment are subject to the special problems imposed by corrosion, electrolysis, motion, pressures, and radically changing environmental conditions. The study of marine engineering places heavy emphasis on the study of transport processes (thermodynamics, fluid dynamics, and heat transfer) as well as solid mechanics (statics, dynamics, and strength of materials). The efforts of the marine engineering classes of 1980, 81 and 82 in their senior design projects resulted in two technical papers presented by students to audiences at technical meetings and international symposia of the Society of Naval Architects and Marine Engineers.

In addition to sailing on their licenses as engineering officers, graduates with the Bachelor of Engineering degree in Marine Engineering are actively sought by ship design firms, shipyards, steamship companies, government agencies, companies which design and build marine systems and components, energy companies (including nuclear), and others as design, production, sales, and service engineers. The engineer who has sea-going experience is particularly useful for both technical work and management.

The Maritime College curriculum is one of only seven degree programs in Marine Engineering available in the United States that are accredited by ABET and recognized by SNAME.



Naval Architecture

Naval Architecture is the field of engineering concerned with the design, construction, repair, and operation of ships and structures which operate in the marine environment. It is closely associated with marine engineering because of the relationship of machinery to hull systems. Ships are the largest self-sufficient mobile structures made by man. To design such complex systems requires a broad education in most branches of engineering, math, and science.

The study of naval architecture stresses fluid dynamics, mechanics, strength of materials, structures, and ship dynamics. The Naval Architecture design core is complemented by courses in operational marine engineering and the summer sea term experiences operating the training ship in preparation for the license as Third Assistant Engineer. In the senior year the student participates in a comprehensive design sequence involving the production of an original design of a commercial vessel such as a container ship, supertanker, offshore tug/supply vessel or fishing vessel, etc. In support of the curriculum the college recently completed a $64' \times 4' \times 2'$ ship model towing tank. This facility is used by students for hydrodynamic tests associated with the ship propulsion and resistance course and is available for special projects.

Graduates with the Bachelor of Engineering degree in Naval Architecture may sail on their license as engineering officers and are well qualified for employment in either the seagoing phase of the marine industry or the shore-side support phase. Shore-side careers for graduate naval architects are varied and include employment with ship design firms, shipyards, governmental agencies (Navy, Coast Guard, Maritime Administration), shipping companies, classification societies, and research and consulting firms, among others.

The Maritime College curriculum is one of only five undergraduate degree programs in naval architecture accredited by ABET and recognized by SNAME.



Nuclear Science and Engineering

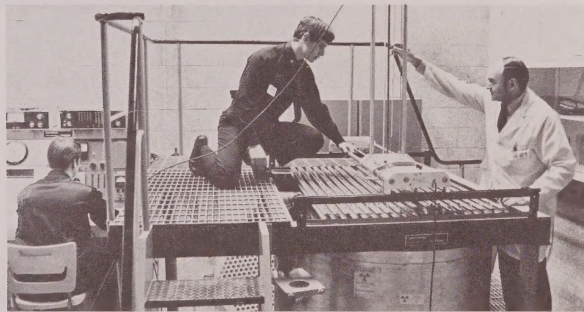
The Nuclear Science and Engineering major is designed to meet the needs of engineering students who are particularly interested in the applications of nuclear energy. This engineering major leads to the engineering officer license and the Bachelor of Engineering degree. Following the two-year core common to all engineering programs, the sequence of courses in the field of nuclear science and engineering includes nuclear reactor theory, metallurgy, radiation science, and nuclear reactor design. The courses dealing with engineering operation include steam generators, electrical systems, and propulsion systems. The complete set of courses is designed to establish a firm foundation for a professional career in the conversion of energy, both fossil and nuclear.

In addition to sailing as engineering officers for the Merchant Marine, Nuclear Science and Engineering graduates are actively sought by the various companies in the nuclear field including shipyards, firms that design and build nuclear systems, government agencies, public utilities, and those concerned with Naval construction, research and development, and personnel training. The cur-



riculum is also well suited to preparing officers as well as civilian employees associated with the Navy's Nuclear Power Program.

Graduates of the program are particularly useful on the job because their education combines theory with the practice of operational marine engineering. Nuclear Science and Engineering graduates are also well qualified for graduate studies in engineering, science, business, public administration, etc.



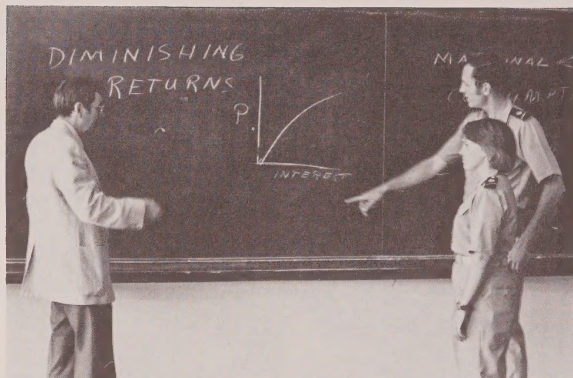
Marine Transportation

Marine Transportation is the curriculum most commonly associated with Deck Officer license preparation as it addresses the commercial operations of ships and the management and economics of the transportation industry.

Studies in the humanities and sciences are combined with nautical and marine transportation subjects to achieve a well-rounded collegiate program which will equip the graduate to meet the present and future needs of life and of the maritime industry, afloat and ashore.

The deck license candidate pursuing Marine Transportation can concentrate in either Transportation Economics or Transportation Management. Approximately eighty percent of the coursework is common to both concentrations. Those who pursue Transportation Economics concentrate on the broader concepts of economic theory and examination of the forces which affect international trade, commerce, and business organization. Cadets who follow the Transportation Management concentration direct their studies to the principles and practices of transportation industry organization, management, and operations. Graduates of these programs are well prepared for graduate studies in business, economics, finance, public administration and law, particularly for those who wish to practice Admiralty Law.

A Master of Science degree program in Transportation Management is offered by the Maritime College and is particularly useful to graduates of other curriculums and colleges who enter the transportation facet of the marine industry. It also provides opportunities for additional studies in transportation management to graduates of the undergraduate program.





Meteorology and Oceanography

The Meteorology and Oceanography curriculum is designed for the deck officer who desires an undergraduate degree in physical science. It is particularly well suited to the graduate who plans to "sail on his license" and is interested in how the ocean and the atmosphere affect the operation and safety of ships. The curriculum also provides a thorough traditional academic study of the atmosphere and the ocean which can be used as a base for graduate study.

Students completing the program of studies earn the Bachelor of Science degree and the license as Third Mate (Oceans Unlimited). In addition to sailing on their licenses in traditional Merchant Marine (Commercial) operations as a deck officer, graduates are especially well qualified to sail as mate/scientist aboard oceanographic research ships using both their professional training and their acquired scientific knowledge. Many graduates have pursued employment with the National Oceanic and Atmospheric Administration including sailing with the NOAA Commissioned Corps, marine weather forecasting with the National Weather Service, and research with the National Ocean Survey. There is also employment in shoreside marine operations in the areas of weather routing of ships, scheduling, and the interpretation of weather and ocean conditions.

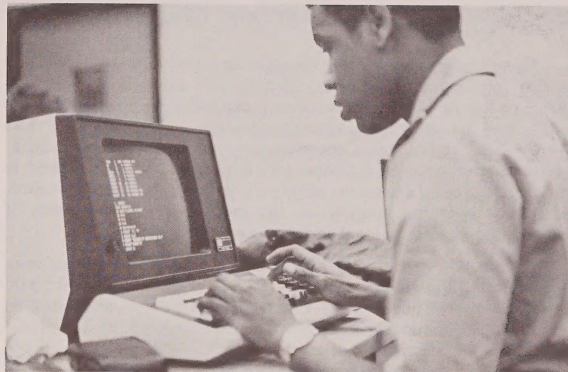


Computer Science-Mathematics

The Computer Science-Mathematics major is available to cadets preparing for either the deck or engine officer license and leads to the Bachelor of Science degree.

The course of study includes the practical and theoretical nautical training required for such officers, together with a series of courses which includes a comprehensive study of computer hardware and software, and programming applications in both scientific and business areas. Programming languages such as FORTRAN, Basic, Pascal, COBOL, and assembly language, are studied in detail. Electronics and digital logic courses introduce students to basic computer hardware concepts. Software concepts are covered in courses in structural programming, data structures, systems analysis, and operating systems. In the mathematics area there are calculus, differential equations, finite mathematics, linear algebra, probability, statistics, numerical analysis, and other courses. Various electives in both computer science and mathematics are available. Laboratory work is integrated throughout.

Computers are playing an increasingly important role in all areas of human endeavor, including the many facets of the marine industry. In addition to sailing on their licenses as deck or engineering officers, graduates of the computer science-mathematics program find ready employment in both industry and business and are particularly useful in marine industry applications such as cargo and passenger operations, accounting, management, research, and ship-building. Graduates also find positions in the computer industry as programmers, analysts, technical salesmen, etc.; or as applied mathematicians in operations, research, and development. Students interested in pursuing graduate studies in computer science or mathematics receive a firm foundation with this program.



Humanities Study Area Concentration (HuSAC)

The person who has both an aptitude for technical subjects and a love for reading, languages, history, and the arts — in short, the Humanities — should consider a combined degree, one which will serve the graduate's diverse interests and capabilities. The Humanities Study Area Concentration combines technical education and training with a liberal arts education. The end result is carefully educated graduates of interdisciplinary curriculums tailored to suit both the interests of the individual and the needs of American and international industry and business.

A HuSAC program which includes extensive training and practice in writing and public speaking as well as courses in art and music would be of considerable assistance to the person interested in advertising or public relations for the transportation or energy industries. With the increasing dependence on Latin America for a significant percentage of our petroleum needs, transportation experts with a command of Spanish will be in great demand. Students who expect their careers to take them to the developing nations in Africa may want a concentration in the French language and culture, since French is still the most widely used language in many parts of that continent. Those intending to work on a graduate degree will find the added practice in writing and independent thought, and the greater depth of humanistic discipline, useful in advanced studies in business, law, community development, public administration, and related areas. There are many other possible combinations of interest, career, and job location which demand an interdisciplinary curriculum.

The Humanities Study Area Concentration is available to both deck and engine license candidates starting in the second class (junior) year. Those considering HuSAC are encouraged to discuss their interests, abilities, and career plans with a faculty advisor or the chairman of the Department of Humanities to ensure suitability of their program.



Naval Science

The Maritime College has a long and proud association with the Navy which dates to our founding in 1874. Many graduates of the college have pursued distinguished careers in the active duty (Regular) Navy, as well as the Navy Reserve.

NROTC

All Cadets seeking active duty as officers in the Navy at graduation are encouraged to join the Navy Reserve Officer Training Corps so they can be assured of that opportunity. Cadets affiliated with NROTC as either Scholarship or College Program students are enrolled as Midshipmen in the USNR and agree to serve on active duty at graduation for at least three years.

The Scholarship Program provides for payment of all tuition and lab fees as well as the purchase of text books and uniforms. In addition, midshipmen on the scholarship receive a monthly subsidy of one hundred dollars from the United States Navy during the school year and are paid as active duty officers while on training cruises. The College Program provides a monthly one hundred dollar subsidy during a student's junior and senior years and active duty pay during the first class training cruise. Midshipmen in both NROTC programs are commissioned and placed on active duty immediately following graduation. Those interested in obtaining more information about NROTC should write to:

COMMANDING OFFICER
NROTC Unit
SUNY MARITIME COLLEGE
Fort Schuyler, Bronx, NY 10465

Merchant Marine Reserve

Cadets who elect to receive the Federal Student Incentive Payment become Midshipmen in the Navy Reserve at the start of their junior year and complete two courses in Naval Science. If otherwise acceptable to the Navy they have the privilege of being commis-

sioned as Ensign in the Navy Reserve (Inactive Duty) at graduation. Those commissioned incur an obligation which can be fulfilled in one of the following ways:

1. Participation in the Merchant Marine component of the Ready Reserve (USNR-R) — a program specifically for those actively employed in the marine industry. Members must: a) sail on their license for at least four months during each two anniversary years following the acceptance of the commission, unless a waiver is issued by the Chief of Naval Personnel, and b) serve two weeks of Active Duty for Training during each anniversary year following the acceptance of the commission, unless a waiver is issued by the Chief of Naval Reserve.
2. Those not employed in the Marine Industry may request a change of designator from Merchant Marine Reserve to Unrestricted Line and affiliate with a Ready Reserve unit which typically meets one weekend per month in addition to two weeks of active duty for training each year.
3. Request active duty for three years (generally).

Many graduates pursue rewarding careers in the Navy Reserve (inactive duty) earning credits which lead to a pension and other benefits after retirement.

Cadets who do not receive the Student Incentive Program are also eligible to apply for the Merchant Marine Reserve commission or for an active duty commission if desired.

The Student Incentive Payment Program is described on page 30.

Admission

Admission to the Maritime College is based on the academic credentials and personal achievements of the applicant and is granted without regard to race, creed, sex, color, or national origin. The competition for admission is keen.

Academic Requirements

1. High School graduation or equivalent including 16 units.
 - 4 English
 - 3 Math (including Trigonometry)
 - 1 Science (Chemistry or Physics—Applicants are encouraged to take both)
 - 8 Electives—Math, science, social science and/or language and mechanical drawing are recommended.
2. Results of either the Scholastic Aptitude Test (SAT) or the American College Test (ACT)

It should be noted that most students offered admission to the college present four years of math, and both chemistry and physics. While not required, the majority of those offered admission also present two to three years of foreign language studies. Shop-type courses and mechanical drawing, when combined with strong academic background, have been helpful to many cadets.

Admissions decisions are based on strength of preparation; performance in high school or college; test scores; and other indications of aptitude revealed in activities, hobbies, experiences, etc. Students with average academic ability but with strong personal qualities and who are sincerely interested in our program are given every consideration for admission. Political nomination is not required to be considered for admission. Few decisions are made without first-half senior year grades.

The Maritime College is authorized to admit students after completion of their 11th grade, provided they meet the requirements for Early Admission explained in the College Catalog.

Educational Opportunity Program

The Educational Opportunity Program (EOP) is an academic and financial support program for capable students who have not had opportunities to realize their academic potential because of limited financial resources and inadequate academic preparation. Prospective students who believe they may qualify for EOP admission should contact the Director of Admissions.

Transfer Students

The Maritime College welcomes applications from students desiring to transfer from other colleges. Curriculum structure and federal requirements for license preparation are such that transfer students cannot ordinarily complete degree and license requirements in less than three years. In order to transfer credit for subjects taken at another college, the courses must be appropriate to the curriculum being pursued at Maritime and equivalent in level and content. Credit is not awarded for courses in which a grade of less than "C" is earned. The Admissions Office would be pleased to assist prospective students plan their preparation for transfer.

Foreign Students

The Maritime College welcomes students from other lands. With the cosmopolitan nature of the Marine Industry it is important that the education of all cadets include opportunities to become more sensitive to other cultures and ways of doing things. During the 1982-83 academic year students from 18 countries were represented in the Regiment of Cadets.

Foreign students must meet all of the regular requirements for admission and in addition must demonstrate proficiency in the use of the English language and the necessary financial sponsorship to pay for their educational expenses. Regrettably the college has no financial aid for which new foreign students are eligible.

Qualifications For License

In order to be eligible for the license an applicant must be a U.S. citizen and meet the physical (health) requirements established by the Coast Guard for original licensure in the Merchant Marine. To be eligible for the Student Incentive Payment an applicant must also meet the physical requirements for Midshipman status in the Navy Reserve. Applicants who are not physically qualified and those who are not U.S. citizens may enroll through special program options. In general, recognized illnesses or physical defects that would render the applicant incapable of performing the regular duties, or interfere with the ordinary duties of an officer at sea are disqualifying. Examples are epilepsy, diabetes, etc.

Coast Guard regulations concerning the original licensing of Merchant Marine Officers require the applicant to have uncorrected vision of at least 20/100 in both eyes, correctable to at least 20/20 in one eye and 20/40 in the other eye for Deck Officers; and at least 20/100 in both eyes, correctable to at least 20/30 in one eye and 20/50 in the other eye for Engineering Officers. Inadequate color perception may disqualify an applicant for licensure. To qualify for Midshipman status vision must correct to 20/20 in both eyes.

Cadet (Not Physically Qualified)

The Maritime College admits a limited number of students each year who are not physically qualified for licensure. The Coast Guard will consider requests for waiver of minor visual deficiencies only at the time of applying for the license during the senior year.

Campus Visits

Prospective students are encouraged to visit Fort Schuyler and to talk with students and staff. Campus visits are most productive on weekdays from early September until May, while school is in session. Tours by cadets, meetings with faculty, and interviews can be arranged by contacting the Admissions Office.



Annual Expenses (1983-84)[†]

Tuition*	\$1,350.00
Room and Board	2,700.00
Summer Sea Term	450.00
Fees	125.00
Books and Supplies	300.00
Total	\$4,925.00
	plus uniforms

Uniforms: A full set of uniforms and other required items that are issued during the first year cost \$1000. Replacement of uniform items due to wear average approximately \$75 per year.

*All cadets who are eligible for Merchant Marine licensure pay the in-state tuition fee of \$1350. Foreign students and out of state students who are not eligible for licensure either for physical reasons or due to not being a U.S. citizen are required to pay out of state tuition of \$2650/year.

[†]Estimated expenses at the time of printing.

Financial Aid

Maritime College expenses are relatively modest, although it still may seem like a large amount of money to pay each year for four years. "What programs are available to help me finance my education?" is a question many prospective students ask. Maritime College cadets who are physically qualified and who are U.S. citizens are eligible for a Student Incentive Payment of \$100 per month which is payable for 12 months a year for four years as long as the student remains continuously in a training status. The incentive payment is not dependent on financial need.

Many students will also be eligible for a Pell Grant (formerly BEOG) provided by the U.S. Government. In 1982-83 approximately 250 students received such awards, ranging from \$135 per year to full tuition, with an average award of approximately \$1060 per year. In addition, New York State residents are eligible for a Tuition Assistance Program (TAP) grant if the family's New York State taxable income (after deductions) is \$25,000 or less. Awards range from \$250 per year to \$1375 per year depending on income and the number of family members in college.

Two major educational loan programs are available which allow the student to spread the cost of his education over a period of up to ten years: the National Direct Student Loan (NDSL) program provides loans at 5% interest and the Guaranteed Student Loan (GSL) program with loans at 9%. There are financial need guidelines for the NDSL and GSL. In both cases repayment of the loan principal and the interest begin after the student leaves school. Parent Loans are also available.

Campus employment and a scholarship program are also available at the college. The NYS Educational Opportunity Program (EOP) and the federal Supplemental Educational Opportunity Program (SEOG) are for those who are particularly needy. Of course, eligible veterans may use their VA benefits at the College. Interested students should also inquire about the opportunities afforded by the NROTC program.

Foreign students entering the United States on student visas are not eligible for the financial aid programs listed above.

Students are encouraged to contact the Financial Aid Office for more information and individual advice.

Federal Student Incentive Program

Cadets who are U.S. citizens and physically qualified for the Merchant Marine license are eligible for the "Student Incentive Payment" program. The Secretary of Transportation provides \$1200/year no-need financial assistance to help offset the cost of uniforms, books and subsistence and to serve as an incentive to take on the challenges of careers that are vital to our nation's commerce and defense.

At the start of the junior year, cadets who receive the Student Incentive Payment become Midshipmen in the Navy Reserve. Participating cadets enter into an agreement with the Secretary of Transportation to accept, if offered, the commission as an officer in the Navy Reserve (inactive duty) or other military service, and to serve the foreign and domestic commerce and the national defense of the United States for at least three (3) years in one or a combination of the following ways:

- A. As a Merchant Marine officer on board American flag ships
- B. As an employee in a maritime related industry ashore if service under item A is not available
- C. As a commissioned officer on active duty in an armed force of the United States or in the National Oceanic and Atmospheric Administration

Deferment of the occupational obligation may be requested for graduate studies in a marine related field or for hardship.

Detailed information of the Student Incentive Payment program is contained in the college catalog and is available on request.



Alumni Comment

Sea-Land Service, Inc.

Richard J. Baumler '52
Vice President

In this rapidly changing technology, you obviously can never stop learning. I believe that NYSMC gives a person the practical and technical experiences necessary to thoroughly broaden him for all facets of managerial responsibilities and develop his learning processes.

In the thirty years since graduating from Fort Schuyler I have many times reflected back on the excellent faculty and top-notch training I received. It is difficult to fully appreciate how three summers at sea help build character and assist an individual in developing his ability to accept responsibility.

INGERSOLL-RAND

Thomas E. Bennett '49
Vice President

The combination of academic and practical courses, plus the training aboard the school ship proved to be an excellent blend of success ingredients. There is no doubt in my mind that the disciplines of Cadet life and the sense of responsibility gained through shipboard life develops in a person an early maturity for decision making, which has proven invaluable for me throughout my business career.

A student attending the Maritime College will receive an excellent education, develop close personal relationships with his classmates that will last a lifetime, and at the same time accept responsibilities which will accelerate his professional maturity. This certainly strikes me as a winning combination.

**Naval Systems Engineering Dept.
U.S. Naval Academy**

P. F. Wiggins '59
Professor and Chairman

The Maritime College program is unique. It is a true four year college with a summer practical maritime work study program. This education experience combined with the responsibilities of the regimental military system enables the Maritime College to continually produce the future leaders of the Maritime Industries of the U.S. Our country, every business and academic organization is crying out for leaders. I strongly believe that the Maritime College has the proper balance of college studies, practical training and military organization to meet this need for leaders.

I have found that no matter where I went to graduate school, or whatever academic position that I have held, my Maritime College experience enabled me to succeed and to assume positions of leadership and responsibility.

Exxon International Company

Karen M. Magliocca '78

The Maritime College offers women a unique opportunity to work with and to supervise both men and other women in a professional and military environment. This experience is invaluable as a base for a woman's development into a corporate "team worker" as well as a "team leader". I have found that it helped me to better understand the corporate system.

Since graduation in 1978 as a Marine Engineer, I have worked with Exxon International Company in the Tanker Department. During 1978 to 1980 I held the position of Ship Superintendent. During my two years at this position, I was a member of an office support team in charge of the daily operation of 15 foreign flag tankers. I planned and supervised voyage repairs, participated in the

preparation and maintenance of a budget for the vessels, and attended a shipyard repair in Lisbon, Portugal.

Association of Maryland Pilots

Capt. John C. Traut '76

The years I spent at Fort Schuyler I look back upon with great fondness and pride.

The dedication and desire of the instructors to impart their knowledge to their students, and their success in doing so, is something for which I will always be grateful. Their showing me that I had the capacity to learn and retain subject matter (which I thought at the time was impossible) has given me the confidence to undertake new endeavors both in my profession as a ship's pilot and in my personal life, and see them to successful completion.

The discipline of the military style life and the responsibilities entrusted to me during the training cruises gave me the ability to quickly analyze situations and make "command decisions", a skill which I call upon many times while piloting. The ability to make these "command decisions" has application in all walks of life, and Maritime College graduates, because of their early exposure to the process, are a step ahead of their contemporaries graduating from other institutions.

Sea-Land Industries, Inc.

Peter J. Finnerty '64
Vice-President, Public Affairs

My time at the Maritime College taught me that patience and persistence are essential to meaningful accomplishment. That encompasses education, career and the successive challenges of management in ocean shipping in these difficult times of great change and adverse conditions. Proper planning and aggressive pursuit have been behind the great successes of the U.S. Merchant Marine. That continues to be the key ingredient.



Accreditation

The Maritime College is a specialized unit of the State University of New York, authorized to grant the Bachelor of Science, Bachelor of Engineering, and Master of Science Degrees. Maritime is fully accredited by the Middle States Association of Colleges and Secondary Schools. Marine Engineering, Electrical Engineering, and Naval Architecture are accredited by the Accrediting Board for Engineering and Technology (ABET). Marine Engineering and Naval Architecture are recognized by the Society of Naval Architects and Marine Engineers (SNAME).

Complete information on the college and programs is contained in the college catalog which can be obtained by contacting:

Office of Admissions
State University of New York
MARITIME COLLEGE
Fort Schuyler, Bronx, NY 10465
(212) 409-7220

The Maritime College reserves the right to make necessary changes in the regulations, fees, and course offerings at any time.

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Sea Land Service, Inc.
Sperry
Electric Boat Division, General Dynamics
Newport News Shipbuilding & Dry Dock Co.
Maritime Administration

This College and Career Viewbook was printed with funds provided by the Maritime College at Fort Schuyler Foundation, Inc.

Office of Admissions
State University of New York
MARITIME COLLEGE
Fort Schuyler, Bronx, NY 10465



The Women's Sports Foundation was founded in 1974 to encourage and support the participation of women in sports. It is incorporated in California as a national, non-profit, educational organization for which contributions are tax-deductible. A financial statement and additional information are available upon request.



women's sports foundation

Membership Card

signature

Benefits and Privileges of Membership

- A subscription to WOMEN'S SPORTS Magazine
 - Access to Library and Information Center
 - Book Club Discounts
 - Speakers Bureau and Resource Clearinghouse
 - Film and slide show loans
 - Discounts on Foundation products
 - Access to the Foundation's toll-free Sports Information Line, 800-227-3988 (In California, 415-563-6266)
- 

DA-LEL CORPORATION
D/B/A DUNKIN' DONUTS
282 SOMERVILLE AVE
SOMERVILLE, MA 02143

Copy B To be filed
with employee's
FEDERAL tax return

3 Employer's identification number

04-2624626

4 Employer's State number

5 Stat. em-
ployee

De-
ceased

Pension
plan

Legal
rep.

942
emp.

Cor-
rection

6

7 Advance EIC payment

2 Employer's name, address, and ZIP code

8 Employee's social security number

556-61-1564

9 Federal income tax withheld

.00

10 Wages, tips, other compensation

16.75

11 FICA tax withheld

1.12

12 Employee's name, address, and ZIP code

13 FICA wages

16.75

14 FICA tips

.00

16 Employer's use

17 State income tax

.00

18 State Wages, tips, etc.

16.75

19 Name of State

MA

20 Local income tax

.00

21 Local wages, tips, etc.

16.75

22 Name of locality

ELIZABETH RAGONA
223 HIGHLAND AVE
SOMERVILLE MA 02143

MA 02143

Form W-2 Wage and Tax Statement 1982

This information is being furnished to the Internal Revenue Service.
OMB No. 1545-0008

Department of the Treasury
Internal Revenue Service

13-2678063
IRS APP. 3/17/82

ENTIRE SECTION FOR EMPLOYEE • DO NOT DETACH PERFORATION BEFORE MAILING

Notice to Employee:

You must file a tax return regardless of your income if any amount is shown in box 7, Advance EIC (earned income credit) payment.

File Copy B of this form with your 1982 Federal income tax return. Attach Copy 2 to your 1982 State or local income tax return. Please keep Copy C for your records. You can use it to prove your right to social security benefits. If your name, social security number, or address is incorrect, please correct Copies B, C, and 2 and tell your employer.

If you have already filed your tax return, or this W-2 corrects the one you included with your return, please amend your Form 1040 or 1040A by filing Form 1040X.

If you have nonwage income of more than \$500 and will owe tax of \$200 or more, (\$300 for 1983) you should file Form 1040-ES, Declaration of Estimated Tax for Individuals, and pay the tax in installments during the year. If you retired during 1982 or plan to retire soon, you may have to pay tax on your income

either by filing Form 1040-ES or by having tax withheld from your pension or annuity. See **Publication 505, Tax Withholding and Estimated Tax**, for details.

Credit for Social Security (FICA) Tax.—If more than one employer paid you wages during 1982 and more than the maximum FICA employee tax, railroad retirement (RRTA) tax, or combined FICA and RRTA tax was withheld, you can claim the excess as a credit against your Federal income tax. (Please see your Federal income tax return instructions.) The FICA rate of 6.70%, under Public Law 95-216, includes 1.30% for hospital insurance benefits and 5.40% for retirement, survivors, and disability insurance.

Box 5. Pension plan.—If you were covered by a government employee plan, a qualified pension or profit-sharing retirement plan, or a tax sheltered annuity plan, the Pension plan box may be marked. Armed Forces reservists, National Guard members, or volunteer firefighters, who have a retirement savings arrangement, should see **Publication 590, Tax Information on Individual Retirement Arrangements**.

C

~~Look within~~
I'm looking ~~for~~ ^{for} the faith of Taly

Silver clouds and turrets up in the sky

I'm looking for ~~the~~ heart that's true

A fairy princess to fall out of the blue

{ But life keeps standing me up -

{ And your best is never enough

Chorus { So I'll take my eyes off of the horizon

Look within (Lw.)

I'm waiting for the revolution

For the president to have a spiritual transcendence

I'm looking for the holy ghost

and for you to say you love me the most.

But. chorus.

Take —

I'm baiting Lormy plants to dig

For the kadatin' to rise in my spine.

I want to a my shelf to ~~crack~~

For nothin' value to take all her Adam's back

Chorus.

Tavating to the mad Hatter

For Tarry Fawcett's head on a silver platter

I waiting for an end to a

sed for the millionaire to knock on my door

20 July take my eyes off the horizon

Look north (100)

I'm looking for the horizon
for the present to have a good view
I'm looking for the horizon

and to go to see you soon with love

Let down
Take

The bottom of the water is clear
For the bottom to see in the water

There

I never thought I could be complete
Till you dropped the will at my feet.
But my ship's not on the horizon
It sails within

It's a submergence

And when waves grow ^{angry} and ^{near} & mean

I can die to the deep serene.

I'm waiting till it's time to eat

For a girl ~~to wait~~ ^{hope} to ~~wait~~ ^{pass} across the street.

I'm waiting for perfect weather

And I'm waiting for you to get you ~~shit~~ together.

I couldn't seem to make a move

Till I got you off ^{to a} ~~my~~ groove.

But the one who always thinks I'm a groove

Grooves within.

Deep within

So I'll keep on ^{sing} with you

And we'll do what we're here to do

But I'll stop waiting for the reverse

LW, DW.

LW.

Rainbow
Friend who sings for me
So deep, so fine.

The colors of your life
Shine round my heart
Like a rainbow.

Your savanah, your loves
Have all been ^{mine} mine

And your laughter a
warming echo.

But this night I feel

So deep, so near,

The way that you've been stunned

By those so busy checking

All your pagers.

Then since you are cold

They never hear the music

You thought they came for.

And I am so sad

And I am so afraid

For those who cannot hear

The music you have made

And I want to tell you

So near, so long

Had make you understand

Your songs will spread the walls

Like a rainbow
With colors that heal
And make no stars
And your love is a knowing

Face the Music

Whether it's a love song
On only lonely blues ^{Woman} You know you've gotta
Face the music

Woman you know you've got to face the
Music

Feeling your way through ~~the~~ your fears
and your fantasies

Hoping for Blessing is a blessing
and still you know you choose to face the
music.

Face the Music

~~But~~ you can't be too wary ~~for~~
It leads you on a merry dance
It's just a chance you've got to
take

It's just a stall you know
you've got to make
This could all be one grand mistake
Oh yes it could, ~~it~~ it could all be
a sweet piece of cake
for your sake.

Whether it moves you or just amuses.
Woman you know you've got to face the
music.

~~to~~ woman you know
You ought to hear even spring in your
Spirit.

If you want to hear it all
Singin' clearly

~~What~~ ~~be~~ the loss though it'd cost
you dearly

Face the music, you gotta face the music
for it leads you on a merry dance

You only owe it what you give it.

It only happens as happily as you live it
This could be your last move right where
You are.

Oh, yes it could.

I ~~it~~ could also be your very best move
So. So. So. So. oh. ——— a h a h e

As I thought there must be a way
I would say that there's a piper
who not be paid.

Whether give your coins away oh yes you
do. Or ~~you~~ pick up your pipes and play
with ha ha ———

Whether it's a love song or only love
blues. Waaa ^{you know} talk music

Waaa you know you gotta face the music
Felling your way through from fear and
your fangs.

Hopin' for blessings as a business
And still you know you choose to face the
music ^{face the music}

~~And still~~ ^{So} you can't be too wary

Novels

Intuder in the Dust

William Faulkner

Random 1948

Go tell it on the Mountain

James Baldwin

Pell 1952

Not Without Laughter

Langston Hughes

~~Pell~~ 1961

Not in the Castle of my Skin

George Lamming

McGraw-Hill 1984

Invisible Man

Ralph Ellison

Vintage 1952

The Voice at the Back Door

Elizabeth Spenser

Time 1956

Short Stories

American Negro Short Stories

Ed. John Henrik Clarke

Hill + Wang 1966

Poetry - For Colored Girls who...

Ntozake Shange

Macmillan 1977 (autographed)

- The one no body knows

Ed. Stephen M. Joseph

Aron 1969

Biographies - The autobiography of Malcolm X

as told to Alex Haley

Bantam 1965

Coming of Age in Mississippi

Anne Moody

Pell 1968

The autobiography of Anne Moody

James Baldwin

Bantam 1968

Education

Notes of A Native Son

Gerry Fairber

Pocket Books 1972

The student as Nigger

James Hurdon

Bantam 1969

The way it spread to be

Ed. John A. Williams

Laurel 1962

~~Novel~~ ~~Short Story~~ The Angry Black

Forante Fanon

Grove Press 1968

The Wretched of the Earth

Charles E. Silberman

Vintage 1964

Crisis in Black and White

Cario + Cobbs

Basic Books/Haper 1980

Black Rage

Ed. C. Eric Lincoln

Doubleday 1974

The Black Experience in Religion

A Black Theology

James Cone

Black Preaching

Henry Mitchell

Black Religion and Black

Crayraud Wilmore

Radicalism

Black Seits and Luts

Joseph Washington

Is God a White Racist?

William J. Gros

Soul Force

Leonard Barrett

Beacon 1963

The Black Muslims in America

C. Eric Lincoln

Schocken 1969

The Negro Church in America

E. Franklin Frazier

223 Highland ave.
Somerville, MA 02143
May 24, 1983

Office of Admission
University of Southern Maine
Portland, ME 04032

Attention: Dennis J. Farrell, Director

To Whom It May Concern:

I am interested in applying to your university in the fall of 1984. I am, as yet, uncertain of my choice of majors, but would appreciate any general information. Your school's newest curriculum catalogue, information on financial aid and housing, and information about your acceptance of students with a GED.

Please send the requested information to the address above. If there are any questions you may call me at (617)625-4281.

Sincerely,

Elizabeth L. Ragona

223 Highland ave.
Somerville, MA 02143
May 24, 1983

Office of Admission
University of Southern Maine
Portland, ME 04032

Attention: Dennis J. Farrell, Director

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Please send the requested information to the address above. If there are any questions you may call me at (617)625-4281.

Sincerely,



Elizabeth L. Ragona

SOMERVILLE

PUBLIC SCHOOLS
81 HIGHLAND AVENUE
SOMERVILLE, MASS. 02143
666-5700



ROBERT A. WATSON, Superintendent
DANIEL M. MACERO, Assistant Superintendent
JOHN P. JOYCE, Assistant Superintendent
FRANK A. SESTITO, Assistant Superintendent

PROJECT SCALE

99 Dover Street
Davis Square
Somerville, MA 02144
625-1335
DONALD H. BAPTISTE, Coordinator



* * * * *

YOU ARE CORDIALLY INVITED TO THE COMPUTER TRAINING PROGRAM'S
SECOND GRADUATION CEREMONY ON THURSDAY, JULY 14, AT 7:00 P.M.
THE CEREMONY WILL BE AT THE SCALE OFFICE, 99 DOVER STREET, DAVIS
SQUARE, SOMERVILLE. REFRESHMENTS WILL BE PROVIDED BY THE
GRADUATING STUDENTS AFTER THE CEREMONY. WE HOPE YOU CAN ATTEND.

R.S.V.P. TO:

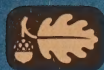
MARIAN MARONEY

625-1335

P.S. BECAUSE SO MANY GRADUATING STUDENTS ARE ALREADY EMPLOYED,
WE ARE HAVING AN EVENING CEREMONY SO EVERYONE CAN ATTEND.

* * * * *

Graduation
Night



THE COLLEGE BOARD

TAKING THE SAT

A GUIDE
TO THE
SCHOLASTIC APTITUDE TEST
AND THE TEST OF
STANDARD
WRITTEN
ENGLISH

- A SAMPLE TEST AND ANSWER SHEET
- DIRECTIONS, EXAMPLES, AND EXPLANATIONS
- HOW TO SCORE YOUR SAMPLE TEST

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Six Points about Special Preparation for the SAT	back cover

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Jeremy Kilpatrick, University of Georgia, Athens, Georgia,
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Margaret Fleming, Cleveland Public Schools, Cleveland,
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Jeanette B. Hersey, Connecticut College, New London,
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Illinois

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Hammett Worthington-Smith, Albright College, Reading,
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Maurice Lee, Vassar College, Poughkeepsie, New York

Marjorie G. Roemer, Brookline High School, Brookline,
Massachusetts

The Admissions Testing Program is a program of the College Board, a nonprofit membership organization that provides tests and other educational services for students, schools, and colleges. The membership is composed of more than 2,500 colleges, schools, school systems, and education associations. Representatives of the members serve on the Board of Trustees and advisory councils and committees that consider the programs of the College Board and participate in the determination of its policies and activities.

This booklet was prepared and produced by Educational Testing Service (ETS), which develops and administers the tests of the Admissions Testing Program for the College Board.

Copies of the booklet are supplied to secondary schools for distribution free of charge to students who plan to register for the SAT. Individual copies may be ordered at \$3 each (or in quantities of 50 or more at \$2 each) from College Board Publications, Box 886, New York, NY 10101.

The College Board and Educational Testing Service are dedicated to the principle of equal opportunity, and their programs, services, and employment policies are guided by that principle.

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TAKING THE SAT

The purpose of this booklet is to provide information that will help you take the Scholastic Aptitude Test (SAT) and the Test of Standard Written English (TSWE) with greater confidence.

Taking the SAT includes descriptions of the SAT and TSWE, an explanation of the different types of questions, and suggestions about how to approach answering the questions. In addition, the booklet contains hints for using your time efficiently and for guessing. Finally, a complete sample test and answer sheet are included as well as an explanation of how the answer sheets are scored.

If you have not already received a copy of this year's Admissions Testing Program *Student Bulletin*, ask for one at your school. The *Bulletin* tells how to register for the test, where and when to take it, and how your scores will be reported.

THE SCHOLASTIC APTITUDE TEST

The SAT is a multiple-choice test made up of separately timed verbal and mathematical sections. Verbal questions measure your ability to understand what you read and the extent of your vocabulary. Mathematical questions measure your ability to solve problems involving arithmetic reasoning, algebra, and geometry. These abilities have been shown to be related to successful academic performance in college. The SAT does not measure other kinds of abilities which may be associated with success in college, such as special talents or motivation.

Your high school record is probably the best evidence of your preparation for college. Because applicants have taken different courses and come from high schools with different grading practices, college admissions officers need a common measure of ability, such as the SAT. However, scores on the SAT are just part of the information used in making an admissions decision.

THE TEST OF STANDARD WRITTEN ENGLISH

The TSWE is a multiple-choice test administered with the SAT. The questions measure your ability to recognize standard written English, the language of most college textbooks and the English you will probably be

expected to use in the papers you write in college. The TSWE is not intended to be used as an admissions test. Instead, after you have been admitted to college, TSWE scores may be used by the college to choose an English course that is best for you.

PREPARING FOR THE TEST

The abilities measured by the SAT develop over years of study and use, both in and out of school. For a statement about special preparation for the SAT, see the back cover of this booklet.

Studying the sample questions, directions, and explanations in this booklet will help you prepare for the test. The directions for the questions and the examples are printed here as they appear in the test book. If you study them now, you will understand them when you take the test.

The total testing time is three hours. Each test book is divided into six 30-minute sections:

- 2 SAT-verbal sections (a total of 85 questions)
- 2 SAT-mathematical sections (a total of 60 questions)
- 1 Test of Standard Written English (50 questions)
- 1 section of experimental verbal, mathematical, or TSWE questions, which do not count toward your score

The questions in the experimental section are used to maintain the quality of the tests and to provide essential information for future editions. The arrangement of sections is not the same in every edition of the test.

Within each group of questions of the same type, the questions are arranged more or less according to difficulty. The easier questions are usually at the beginning of the group and the more difficult at the end. Therefore, if you are working through a set of questions of a particular type and you find that the questions are becoming difficult for you, simply read quickly through the remaining questions in the group, answering only those that you feel you know. You should then begin working on the next group of questions. You can return to the questions you omitted if you have time. Remember, you get just as much credit for correctly answering easy questions as for correctly answering hard ones.

You get one point for each question you answer correctly, and you lose a fraction of a point for each question you answer incorrectly. You neither gain nor lose points for questions you omit. (See page 44 for scoring information.)

You may do scratchwork in the test book or mark questions you omitted and may want to go back to. You should *not* make extra marks on the answer sheet, because they could be misread as answers by the scoring machine.

Because of the way the test is scored, haphazard or random guessing for questions you know nothing about is unlikely to change your score. When you know that one or more choices can be eliminated, guessing from among the remaining choices should be to your advantage.

Many students who do well on the SAT omit some questions. Many students who receive average or slightly above average scores answer from 40 to 60 percent of the questions correctly. Questions vary in difficulty. Some are answered correctly by as many as 90 percent of the students, but some are answered correctly by as few as 10 percent.

Suggestions for answering specific types of questions follow.

SAT-VERBAL SECTIONS

There are four types of questions in the verbal sections of the SAT: 25 antonyms, 20 analogies, 15 sentence completions, and 25 questions based on reading passages. The antonyms usually take the least time, followed by analogies, sentence completion questions, and, finally, the reading comprehension questions. High-scoring students can do between 2 and 3 antonyms a minute, but the same students may take more than 7 minutes to read a 400-word passage and answer 5 questions on it.

Your answers to the 85 questions in the verbal sections make up your total verbal score. (See page 44.) The score report you'll receive will also show two subscores: (1) a vocabulary subscore, based on the antonym and analogy questions; (2) a reading subscore, based on the sentence completions and the questions on reading passages.

A careful balance of reading materials and words drawn from a variety of subject-matter fields helps assure that the test is fair to students with different interests. However, no specialized knowledge in science, social sciences, literature, or other fields is required.

Antonyms (opposites)

Antonym questions test the extent of your vocabulary. The vocabulary used in the antonym questions includes words that high school students come across in their general reading, although some words may not be the kind that you use in everyday speech.

Directions: Each question below consists of a word in capital letters, followed by five lettered words or phrases. Choose the

word or phrase that is most nearly *opposite* in meaning to the word in capital letters. Since some of the questions require you to distinguish fine shades of meaning, consider all the choices before deciding which is best.

EXAMPLE:

GOOD: (A) sour (B) bad (C) red
(D) hot (E) ugly

A ● C D E

You can probably answer this example without carefully considering all of the choices. However, most of the antonyms in the verbal section require more careful analysis. When you work on antonym questions, remember that:

1. Among the five choices offered, you are looking for the word that means the *opposite* of the given word. No words that have the same meaning as the given word are included among the five choices.
2. You are looking for the *best* answer. Read all of the choices before deciding which one is best, even if you feel sure you know the answer. For example:

SUBSEQUENT: (A) primary (B) recent
(C) contemporary (D) prior (E) simultaneous

Someone working quickly might choose (B) *recent* because it refers to a past action and *subsequent* refers to a future action. However, choice (D) *prior* is the best answer.

3. Few words have exact opposites, that is, words that are opposite in all of their meanings. You should find the word that is *most nearly* opposite. For example:

FERMENTING: (A) improvising (B) stagnating
(C) wavering (D) plunging deeply (E) dissolving

Even though *fermenting* is normally associated with chemical reactions, whereas *stagnating* is normally associated with water, *fermenting* means being agitated and *stagnating* means being motionless. Therefore, choice (B) *stagnating* is the best antonym of *fermenting*.

4. You need to be flexible. A word can have several meanings. For example:

DEPRESS: (A) force (B) allow (C) clarify
(D) elate (E) loosen

The word *depress* can mean "to push down." However, no word meaning "to lift up" is included among the choices. Therefore, you must consider another meaning of *depress*, "to sadden or discourage." Option (D) *elate* means to fill with joy or pride. The best answer is (D) *elate*.

5. You could try to put the word in a sentence. If you don't know the dictionary meaning of a word but have a feeling for how the word should be used, try to make up a short phrase or sentence using the word. This may give you a clue as to which choice is

an opposite, even though you may not be able to define the word precisely.

INCUMBENT: (A) conscious (B) effortless
(C) optional (D) improper (E) irrelevant

One of the meanings of *incumbent*, and the one you may know best, is "the holder of an office" as in the sentence, "The incumbent president usually has a better chance of winning an election than the challenger." However, an opposite of that meaning is not included in the choices. Try to think of another use of *incumbent*, such as in the sentence, "It is incumbent upon me to finish this." If you can think of such a phrase, you realize that *incumbent* means "imposed as a duty" or "obligatory."

Of the five choices, (A), (B), and (D) are in no way opposites of *incumbent* and you can easily eliminate them. Choice (E) means "not pertinent" and choice (C) means "not compulsory." Although choice (E) may look attractive, choice (C) *optional* is more nearly an exact opposite to *incumbent*. Choice (C), therefore, is the answer.

6. Because answering antonyms depends on knowing the meanings and uses of words, memorizing word lists is probably of little use. Anything that helps you to think about words and how they are used improves your verbal ability and is likely to improve your performance on antonyms and other kinds of verbal questions. Read carefully some moderately complex books or some good magazines on topics with which you are not familiar. If you come across unfamiliar words that you can't understand from the context, use a dictionary. Do crossword puzzles or play word games with your friends or family. These exercises should be at least as helpful as studying word lists and certainly more interesting.

Analogyes

Analogy questions test your ability to see a relationship in a pair of words, to understand the ideas expressed in the relationship, and to recognize a similar or parallel relationship.

Directions: Each question below consists of a related pair of words or phrases, followed by five lettered pairs of words or phrases. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair.

EXAMPLE:

YAWN : BOREDOM :: (A) dream : sleep
(B) anger : madness (C) smile : amusement
(D) face : expression
(E) impatience : rebellion

A B C D E

When you answer analogy questions,

1. Try to establish a precise relationship between the first two words before examining the answer

choices. State this relationship as clearly as you can in a sentence or phrase. Next, find the choice with a pair of words that have the same relationship, and that express the same idea as the original pair of words. In the example above, a yawn is a sign of boredom in the same way that a smile is a sign of amusement. Another example is the following:

SUBMISSIVE : LED :: (A) wealthy : employed
(B) intolerant : indulged (C) humble : humiliated
(D) incorrigible : taught
(E) inconspicuous : overlooked

The relationship between *submissive* and *led* could be expressed as "to be submissive is to be easily led." Only choice (E) has the same relationship as *submissive* and *led*; "to be inconspicuous is to be easily overlooked" parallels "to be submissive is to be easily led."

Although the wealthy may find it easier to get employment than do the poor, the statement "to be wealthy is to be easily employed" is an expression of opinion and not an expression of the relationship between the words according to their dictionary meanings. Remember that the relationship that is to be established between the two words should take into account either the dictionary or implied meanings of the words.

2. Practice recognizing relationships. Below are three examples of the relationships that could be used.

SONG : REPERTOIRE :: (A) score : melody
(B) instrument : artist (C) solo : chorus
(D) benediction : church (E) suit : wardrobe

The best answer is choice (E). The relationship between the words can be expressed as "several (first word) make up a (second word)." Several (songs) make up a (repertoire) as several (suits) make up a (wardrobe).

REQUEST : ENTREAT :: (A) control : explode
(B) admire : idolize (C) borrow : steal
(D) repeat : plead (E) cancel : invalidate

The best answer is choice (B). Although both words have similar meanings, they express different degrees of feeling. To (entreat) is to (request) with strong feeling as to (idolize) is to (admire) with strong feeling.

To answer analogy questions, you must think carefully about the precise meanings of words. For instance, if you thought the word "entreat" meant only "to ask" instead of "to ask urgently," you would have trouble establishing the correct relationship between *request* and *entreat*.

FAMINE : STARVATION :: (A) deluge : flood
(B) drought : vegetation (C) war : treaty
(D) success : achievement (E) seed : mutation

The best answer is choice (A). (Famine) results in (starvation) as a (deluge) results in a (flood).

3. Don't be misled by relationships that are close to but not parallel to the relationship in the original pair. All of the pairs of words listed in the choices have relationships that can be stated; however, the correct answer has most nearly the same relationship as the original pair. Look at the following example.

**KNIFE : INCISION :: (A) bulldozer : excavation
(B) tool : operation (C) pencil : calculation
(D) hose : irrigation (E) plow : agriculture**

On the most general level, the relationship between *knife* and *incision* is that the object indicated by the first word is used to perform the action indicated by the second word. Since "a knife is used to make an (incision)," "a bulldozer is used to make an (excavation)," and "a hose is used for (irrigation)," there appear to be two correct answers. You need to go back and state the relationship more precisely. Some aspect of the relationship between the original pair exists in only one of the choices. A more precise relationship between *knife* and *incision* could be expressed as: "a knife cuts into something to make an incision" and "a bulldozer cuts into something to make an excavation." This relationship eliminates *hose : irrigation* as a possible answer, and no other relationship between *hose : irrigation* parallels the relationship to *knife : incision* as well. The best answer is choice (A).

4. Remember that words can have more than one relationship. For example:

**PRIDE : LION :: (A) snake : python (B) pack : wolf
(C) rat : mouse (D) bird : starling (E) dog : canine**

A possible relationship between *pride* and *lion* might be that "the first term describes a characteristic of the second (especially in mythology)." Using this reasoning, you might look for an answer such as *wisdom : owl*, but none of the given choices has that kind of relationship. Another relationship between *pride* and *lion* is "a group of lions is called a pride"; therefore, the answer is (B) *pack : wolf*; "a group of wolves is called a pack."

Sentence Completion Questions

Sentence completion questions test your ability to recognize the relationships among parts of a sentence. You are given a sentence from which one or two words have been removed and asked to complete the sentence by choosing the word or words that are consistent with other parts. Sentence completion questions ask you to know the words listed as choices and their proper use in the context of a sentence. The sentences, taken from published material, cover a variety of topics. Each sentence provides enough information so that you can find the correct answer without any information beyond what is contained in the sentence itself.

Directions: Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are five lettered words or sets of words. Choose the word or set of words that *best* fits the meaning of the sentence as a whole.

EXAMPLE:

Although its publicity has been ----, the film itself is intelligent, well-acted, handsomely produced, and altogether ----.

- (A) tasteless . . respectable (B) extensive . . moderate
(C) sophisticated . . amateur (D) risqué . . crude
(E) perfect . . spectacular

● (C) (D) (E)

The word *although* suggests that the publicity gave the wrong impression of the movie, so look for two words that are more or less opposite in meaning. Also, the second word has to fit in with "intelligent, well-acted, handsomely produced." Choices (B), (D), and (E) are not opposites. Choice (C) can't be the correct answer even though *sophisticated* and *amateur* are nearly opposites, because an "intelligent, well-acted, handsomely produced" film isn't amateurish. Only choice (A), when inserted in the sentence, gives a logical statement.

Here are some suggestions to keep in mind when you answer sentence completion questions:

1. Read the entire sentence carefully; make sure you understand the ideas being expressed.
2. Don't select an answer simply because it is a popular cliché or "sounds good."
3. Look for grammatical clues within the sentence. For example:

The excitement does not ---- but ---- his senses, giving him a keener perception of a thousand details.

- (A) slow . . diverts (B) blur . . sharpens
(C) overrule . . constricts (D) heighten . . aggravates
(E) forewarn . . quickens

The word *but* implies that the answer will involve two words that are more or less opposite in meaning. If you keep this in mind, you can eliminate all of the choices except for (B) *blur . . sharpens*. Only the words in choice (B) imply opposition. Also, "sharpens his senses" is consistent with the notion that he had a "keener perception of a thousand details."

4. If the sentence has two blanks to be filled, make sure that *both* words make sense in the sentence. For example:

They argue that the author was determined to ---- his own conclusion, so he ---- any information that did not support it.

- (A) uphold . . ignored (B) revise . . destroyed
(C) advance . . devised (D) disprove . . distorted
(E) reverse . . confiscated

The first words in choices (A) *uphold . . ignored* and (C) *advance . . devised* seem all right. However, the

second word in choice (C) *advance* . . . *devised* does not make sense in the sentence; why would an author who wished to advance his theory devise information that did not support it? Only choice (A) makes a logically consistent sentence.

Mr. Dillon is a skeptic, ---- to believe that the accepted opinion of the majority is generally ----.

- (A) prone . . . infallible (B) afraid . . . misleading
(C) inclined . . . justifiable (D) quick . . . significant
(E) disposed . . . erroneous

The words to be inserted in the blank spaces in the question above must result in a statement that is consistent with the definition of a skeptic. Since a skeptic would hardly consider the accepted opinion of the majority as *infallible*, *justifiable*, or *significant*, you can eliminate choices (A), (C), and (D). A skeptic would not be *afraid* that the accepted opinion of the majority is *misleading*; he would believe that it was. Therefore, choice (B) is not correct. Only choice (E) *disposed* . . . *erroneous* yields a logical sentence.

5. After choosing an answer, read the entire sentence to yourself. Make sure that the sentence is logical.

Reading Passages

The reading comprehension section of the SAT presents a fairly familiar task, especially if you have read widely. The reading comprehension section tests a variety of skills. Some questions test your understanding of what is stated directly. Sometimes you have to interpret and analyze what you read. Some questions test your ability to recognize applications of the author's principles or opinions. Others require you to judge what you have read—to identify strong and weak points in the presentation, to determine how well the author supports any claims with evidence, and to recognize the means by which the author communicates points. Each test contains passages drawn from the following categories:

Narrative:	(novels, short stories, biographies, essays)
Biological Science:	(medicine, botany, zoology)
Physical Science:	(chemistry, physics, astronomy)
Humanities:	(art, literature, music, philosophy, folklore)
Social Studies:	(history, economics, sociology, government)
Argumentative:	(the presentation of a definite point of view on some subject)

Each passage contains all the information you need to answer a question. However, passages about subjects

you are familiar with or interested in may be easier for you. If you find a passage that seems difficult to you, skip it and go on. You will be omitting only a few questions and you will be saving yourself time that can be better used somewhere else.

Is it better to read the questions before reading the passage? Probably not, but the content of a passage may help you decide. For instance, if you're good in science, you may follow the reasoning in a science passage and remember most of the details. Looking at the questions before you read the science passage would probably be a waste of time for you. However, if you find science passages confusing, reading the questions first may be worth your time. While you are doing the sample test, try both methods and see which works better for you in terms of selecting the correct answer quickly.

Read closely and attentively. Follow the reasoning; notice how each piece of information relates to the ideas being presented. Notice attitudes, tone, and general style. You may want to check an important fact or idea, but don't waste time underlining or making notes in the margin. Try to get a sense of the principal ideas, facts, and organization of the passage.

Here are some suggestions that may be helpful:

1. Read all of the choices before you select an answer.
2. Answer questions on the basis of what is in the passage. Do not answer questions on the basis of your personal opinion or knowledge.
3. Answer the question that is asked. Do not pick one of the choices simply because it is a true statement.
4. Make sure that the answer you choose is completely correct. Do not be misled by choices that are partially true.

Several types of questions are asked about the passages. Some questions test your ability to differentiate between the main idea of a passage and secondary and supporting information. In answering questions that ask for the main idea, don't be distracted by statements that are true according to the passage but that are secondary or supportive to the central point. Below is a short excerpt from a passage that presents a particular point of view of Plato's *Republic*. The author of this passage expresses ideas strongly so the passage would be classified as argumentative.

Directions: The passage below is followed by questions based on its content. Answer all questions following the passage on the basis of what is *stated* or *implied* in that passage.

That Plato's *Republic* should have been admired, on its political side, by decent people is perhaps the most astonishing example of literary snobbery in all history.

Let us consider a few points in this totalitarian tract. The main purpose of education is to produce courage in battle. To this end, there is to be a rigid censorship of the stories told by mothers and nurses to young children; there is to be no reading of Homer because that degraded versifier makes

heroes lament and gods laugh; the drama is to be forbidden because it contains villains and women; music is to be only of certain kinds, which, in modern terms, would be military bands playing "My Country 'Tis of Thee" and "Stars and Stripes Forever."

A *main idea* question that might be asked is:

1. The main point of the passage is to

- (A) cast contempt on the kind of music advocated in Plato's *Republic*
- (B) describe the content of Plato's *Republic*
- (C) discuss the positive and negative aspects of Plato's *Republic*
- (D) show how Plato's *Republic* influenced the lives of people at the time
- (E) criticize the political philosophy contained in Plato's *Republic*

Another *main idea* question that might be asked is:

2. Which of the following would be the most appropriate title for the passage?

- (A) The Perfection of Plato's *Republic*
- (B) Why Plato's *Republic* Has Been Censored
- (C) Plato's *Republic*: A Totalitarian Tract
- (D) The Heroes of Plato's *Republic*
- (E) Plato: The Moralist

Both questions require only that you understand the main point, which the author makes in the first two sentences; the rest of the passage gives supporting detail. Note that the main point of a passage is not always stated at the beginning. In question 1, the statement in choice (A) mentions one of the supporting points, not the main idea. Choice (B) gives some of the content of the passage, but the main thrust of the passage is much more negative than the statement in choice (B). Choice (C) is inaccurate because the author doesn't admit that the book has any positive aspects. Choice (D) is not supported. Only choice (E) adequately describes the main idea. For the second question, follow the kind of analysis made of question 1. You'll see that only option (C) accurately reflects the main idea of the passage.

Another type of question asks for details stated in the passage. Once again, be sure to answer the question that is asked. For example:

3. According to the passage, which of the following are statements of Plato's beliefs?

- I. Drama should expose the weaknesses of villains.
- II. Only those parts of Homer dealing with the heroes and gods may be used.
- III. Stories told to children should be strongly censored.

- (A) I only (B) II only (C) III only
(D) II and III only (E) I, II, and III

Statement I is inaccurate because no drama is permitted, and statement II is inaccurate as no parts of Homer may be read. Only statement III is accurate and the correct answer is choice (C).

You can use partial information to help you, even if you're not sure of the answer. In the question above, if you know that statement I is incorrect, you

can eliminate choices (A) and (E), leaving only three other answers to choose from. If you are doubtful about II but sure of III, you can eliminate (A), (E), and (B), leaving you one chance in two of choosing correctly between (C) and (D).

4. The passage suggests that all of the following are forbidden in Plato's *Republic* EXCEPT

- (A) dance music
- (B) patriotic music
- (C) plays about villains
- (D) portrayals of the amusements of the gods
- (E) stories about poor people stealing to feed their families

Question 4 asks you to identify which of the choices is not forbidden. Since the author mentions only that songs played by military bands are permitted, you must recognize that the suggestion is that patriotic music is allowed. This is reinforced by the connotations of the titles of the songs given as examples. The correct answer is option (B).

Some of the questions ask you to evaluate or interpret the passage. Following is an example of such a question:

5. The author's attitude toward Plato's *Republic* is one of

- (A) quiet concern (B) cautious acceptance
- (C) reverent admiration (D) outraged disapproval
- (E) total indifference

Question 5 requires you to identify the author's attitude toward Plato's philosophy. A strong attitude of disapproval is evident in almost every sentence, but most obviously in line 4 in which the author refers to Plato's *Republic* as a "totalitarian tract." The correct answer is (D).

You can improve your reading comprehension by reading extensively and, what is most important, thinking while you are reading. If you have limited your reading to only one or two particular topics, practice reading about unfamiliar subjects. Many books and good science, news, literature, and art magazines provide interesting material. While you are reading, follow the author's argument, line of reasoning, methods used to make a point, and the implications of what is said.

SAT-MATHEMATICAL SECTIONS

Some questions in the mathematical sections of the SAT require you to apply numerical, graphic, spatial, symbolic, and logical techniques to situations familiar to you; these may be similar to exercises in your textbooks. Other questions may require you to do some original thinking. The mathematical preparation expected is a year of algebra and some geometry. Although most of the geometric ideas involved are us-

ually taught in the elementary and junior high years, a few of the questions involve topics that are first taught in high school geometry. Many of these geometric concepts are reviewed in the material that follows.

Two types of multiple-choice questions are used in the SAT-mathematical sections:

1. Standard multiple-choice questions (approximately two-thirds of the questions)
2. Quantitative comparison questions (approximately one-third of the questions)

These types will be explained later. Most of the questions are classified as arithmetic, algebra, or geometry, and there is approximately the same number of each type.

Some Mathematical Concepts with Which You Should Be Familiar

Arithmetic—basic addition, subtraction, multiplication, and division; percent; average; odd and even numbers; prime numbers; divisibility (for example, 24 is divisible by 8)

Algebra—negative numbers; simplifying algebraic expressions; linear equations; inequalities; simple quadratic equations; positive integer exponents; roots

Geometry—area (square, rectangle, triangle, and circle); perimeter of a polygon; circumference of a circle; volume of a box and cube; special properties of isosceles, equilateral, and right triangles; 30° — 60° — 90° and 45° — 45° — 90° triangles; properties of parallel and perpendicular lines; locating points on a coordinate grid

This section will help you review or refresh your knowledge about mathematical vocabulary and concepts frequently needed to solve problems.

Words and Phrases You Should Know

When You See:

Positive Integers
Negative Integers
Integers
Odd Numbers
Even Numbers
Consecutive Integers
Prime Numbers
Average

Think:

1, 2, 3, 4, ...
-1, -2, -3, -4, ...
..., -4, -3, -2, -1, 0, 1, 2, 3, 4, ...
1, 3, 5, 7, 9, ...
0, 2, 4, 6, 8, ...
 $n, n + 1, n + 2, \dots$ (n = an integer)
2, 3, 5, 7, 11, 13, 17, 19, ...
The sum of terms divided by the number of terms, for example: Average of 9, 11, and 16 = $\frac{9 + 11 + 16}{3} = 12$

Concepts You Should Know

Odd and Even Numbers

Addition:

even + even = even
odd + odd = even
even + odd = odd

Multiplication:

even $\times$ even = even
even $\times$ odd = even
odd $\times$ odd = odd

Percent

Percent means hundredths or number out of 100, so that

$\frac{40}{100} = 40$ percent and 3 is 75 percent of 4 (because $\frac{3}{4} =$

$\frac{75}{100} = 75$ percent).

Some Percent Equivalents

$\frac{1}{10} = 0.1 = 10\%$

$\frac{1}{5} = 0.2 = 20\%$

$\frac{1}{2} = 0.5 = 50\%$

$\frac{1}{1} = 1.0 = 100\%$

$\frac{2}{1} = 2.0 = 200\%$

General Method of Converting a

Fraction $\frac{a}{b}$ to a Percent:

$\frac{a}{b} = \frac{x}{100}$

$x = 100 \left(\frac{a}{b} \right)$

Example: $\frac{3}{4} = \frac{x}{100}$

Therefore, $x = 100 \left(\frac{3}{4} \right) = 75$

$\frac{3}{4} = \frac{75}{100} = 75\%$

Note: To convert a fraction or decimal to percent, multiply by 100.

Percents Greater Than 100

Problem: 5 is what percent of 2?

Solution: $\frac{5}{2} = \frac{x}{100}$

$x = \frac{500}{2} = 250$

Therefore, $\frac{5}{2} = \frac{250}{100} = 250\%$

So, 5 is 250 percent of 2. Note that this is equivalent to saying that 5 is $2\frac{1}{2}$ times 2.

Problem: Sue earned \$10 on Monday and \$12 on Tuesday. The amount earned on Tuesday was what percent of the amount earned on Monday?

An equivalent question is “\$12 is what percent of \$10?”

Solution: $\frac{12}{10} = \frac{x}{100}$

$x = \frac{1,200}{10} = 120$

So, $\frac{12}{10} = \frac{120}{100} = 120\%$

Percents Less Than 1

Problem: 3 is what percent of 1,000?

Solution: $\frac{3}{1,000} = 0.003 = 0.3\%$ or $\frac{3}{10}$ of 1 percent

Problem: Socks are \$1.00 a pair or 2 pairs for \$1.99. The savings in buying 2 pairs is what percent of the total cost at the single pair rate?

Solution: At the single pair rate, 2 pairs would cost \$2.00, so the savings is only \$0.01. Therefore, you must answer the question "\$0.01 is what percent of \$2.00?"

Because $\frac{0.01}{2.00} = \frac{0.5}{100}$, the savings is 0.5% or $\frac{1}{2}$ of 1 percent.

Squares of Integers

n	1	2	3	4	5	6	7	8	9	10	11	12
n ²	1	4	9	16	25	36	49	64	81	100	121	144
n	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12
n ²	1	4	9	16	25	36	49	64	81	100	121	144

Signed Number Properties

positive $\times$ positive = positive

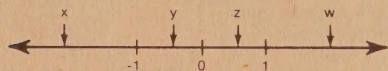
negative $\times$ negative = positive

negative $\times$ positive = negative

$-(a - b) = b - a$

$(-x)^2 = x^2$

If $x < 0$, $x^2 > 0$



On the number line above: $x < y$ For example, $-2 < -\frac{1}{2}$
 $y^2 > 0$

$z^2 < z$ For example, $(\frac{1}{2})^2 < \frac{1}{2}$

$x^2 > z$ For example, $(-2)^2 > \frac{1}{2}$

$z^2 < w$

$x + z < 0$

$y - x > 0$

Factoring

$$x^2 + 2x = x(x + 2)$$

$$x^2 - 1 = (x + 1)(x - 1)$$

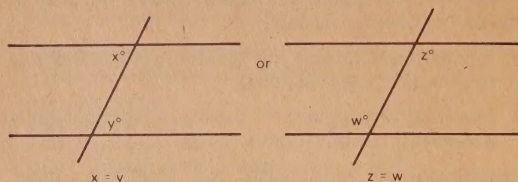
$$x^2 + 2x + 1 = (x + 1)(x + 1) = (x + 1)^2$$

$$x^2 - 3x - 4 = (x - 4)(x + 1)$$

Properties of Parallel Lines

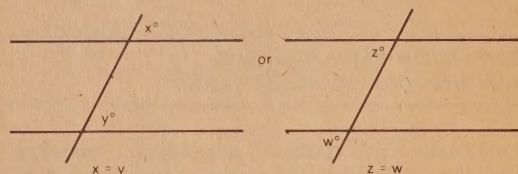
1. If two parallel lines are cut by a third line, the alternate interior angles are equal.

For example:



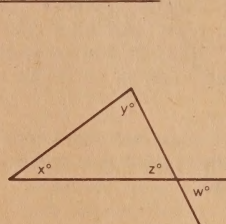
2. If two parallel lines are cut by a third line, the corresponding angles are equal.

For example:



Note: Words like "alternate interior" or "corresponding" are generally not used on the test, but you do need to know which angles are equal.

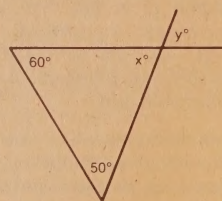
Angle Relationships



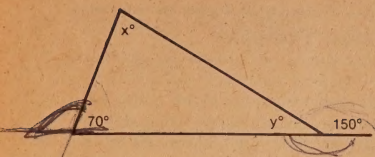
$x + y + z = 180$
 (Because the sum of the interior angles of a triangle is 180°)

$$z = w$$

(When two straight lines intersect, vertical angles are equal.)



$y = 70$
 (Because x is equal to y and $60 + 50 + x = 180$)

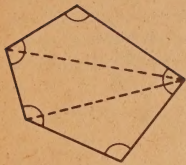


$$y = 30$$

(Because a straight angle is 180° , $y = 180 - 150$)

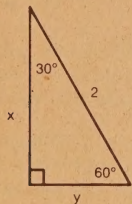
$$x = 80$$

(Because $70 + 30 + x = 180$)



The sum of all angles of the polygon above is $3(180^\circ) = 540^\circ$ because it can be divided into 3 triangles, each containing 180° .

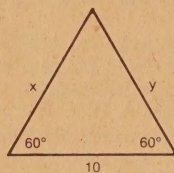
Side Relationships



$y = 4$
(Because the length of the side opposite the 30° angle in a right triangle is half the length of the hypotenuse)

$$x = \sqrt{3}$$

(By the Pythagorean Theorem,
 $x^2 + 1^2 = 2^2$
 $x^2 = 3$
 $x = \sqrt{3}$)



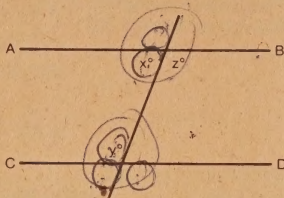
$x = y = 10$
(Because the unmarked angle is 60° , all angles of the triangle are equal, and, therefore, all sides of the triangle are equal)

$$90 + 4x + 5x = 180$$

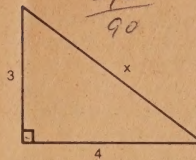
$$9x = 90$$

$$x = 10$$

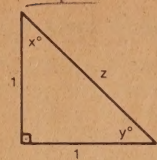
$x = 10$
(Because $4x + 5x = 90^\circ$) Also, the length of side AC is greater than the length of side BC (Because $\angle B$ is greater than $\angle A$)



If AB is parallel to CD, then $x + y = 180$ (Because $x + z = 180$ and $y = z$)



$x = 5$
(By the Pythagorean Theorem,
 $x^2 = 3^2 + 4^2$
 $x^2 = 9 + 16$
 $x^2 = 25$
 $x = \sqrt{25} = 5$)



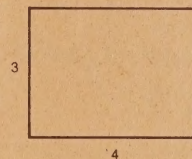
$x = y = 45^\circ$
(Because two sides are equal, the right triangle is isosceles and angles x and y are equal. Also, $x + y = 90$ which makes both angles 45°)
 $z = \sqrt{2}$
(Because $1^2 + 1^2 = z^2$)

Area and Perimeter Formulas

Area of a rectangle = length $\times$ width = $L \times W$

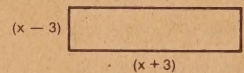
Perimeter of a rectangle = $2(L + W)$

Examples:



Area = 12

Perimeter = 14



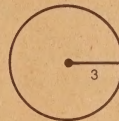
$$\text{Area} = (x - 3)(x + 3) = x^2 - 9$$

$$\text{Perimeter} = 2[(x + 3) + (x - 3)] = 2(2x) = 4x$$

Area of a circle = πr^2 (where r is the radius)

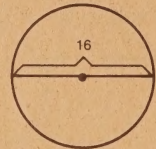
Circumference of a circle = $2\pi r = \pi d$ (where d is the diameter)

Examples:



$$\text{Area} = \pi(3^2) = 9\pi$$

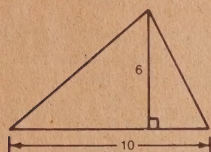
$$\text{Circumference} = 2\pi(3) = 6\pi$$



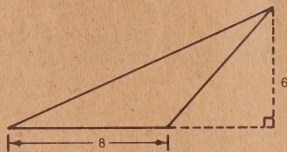
$$\text{Area} = \pi(8^2) = 64\pi$$

$$\text{Circumference} = \pi(16) = 16\pi$$

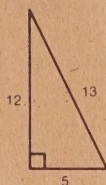
Area of a triangle = $\frac{1}{2}(\text{altitude} \times \text{base}) = \frac{1}{2} a \cdot b$



$$\text{Area} = \frac{1}{2} \cdot 6 \cdot 10 = 30$$

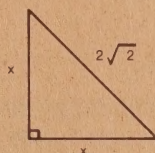


$$\text{Area} = \frac{1}{2} \cdot 6 \cdot 8 = 24$$



$$\text{Area} = \frac{1}{2} \cdot 12 \cdot 5 = 30$$

$$\text{Perimeter} = 12 + 5 + 13 = 30$$



$$x = 2$$

$$(\text{Because } x^2 + x^2 = (2\sqrt{2})^2)$$

$$2x^2 = 4 \cdot 2$$

$$x^2 = 4$$

$$x = 2$$

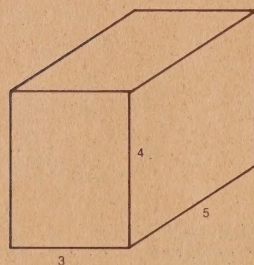
$$\text{Area} = \frac{1}{2} \cdot 2 \cdot 2 = 2$$

$$\text{Perimeter} = 2 + 2 + 2\sqrt{2} = 4 + 2\sqrt{2}$$

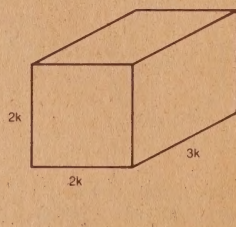
Volume of a Rectangular Solid (box)

$$\text{Volume of a box} = \text{length} \times \text{width} \times \text{height} = L \cdot W \cdot H$$

Examples:



$$\text{Volume} = 5 \cdot 3 \cdot 4 = 60$$



$$\text{Volume} = (3k)(2k)(2k) = 12k^3$$

The formulas and symbols given in the directions that follow appear in the test book. Learning them now will help you when you take the actual test.

Standard Multiple-Choice Questions

Directions: In this section solve each problem, using any available space on the page for scratchwork. Then decide which is the best of the choices given and blacken the corresponding space on the answer sheet. The following information is for your reference in solving some of the problems.

Circle of radius r :

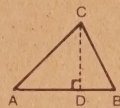
$$\text{Area} = \pi r^2$$

$$\text{Circumference} = 2\pi r$$

The number of degrees of arc in a circle is 360.

The measure in degrees of a straight angle is 180.

Triangle: The sum of the measures in degrees of the angles of a triangle is 180.



If $\angle CDA$ is a right angle, then (1) area of $\triangle ABC =$

$$\frac{AB \times CD}{2}$$

$$(2) AC^2 = AD^2 + DC^2$$

Definitions of symbols:

$=$ is equal to

$\neq$ is unequal to

$<$ is less than

$>$ is greater than

$\leq$ is less than or equal to

$\geq$ is greater than or equal to

$\parallel$ is parallel to

$\perp$ is perpendicular to

Note: Figures which accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated. All numbers used are real numbers.

When you take the SAT, remember to use the available space in the test book for scratchwork. You are *not* expected to do all the reasoning and figuring in your head.

The problems that follow will give you an idea of the type of mathematical thinking required. First, try to answer each question yourself. Then read the explanation, which may give you new insights into solving the problem and perhaps point out techniques that you will be able to use again. Note that the directions indicate to select the *best* of the choices given.

1. If $2a + b = 5$, then $4a + 2b =$

- (A) $\frac{5}{4}$ (B) $\frac{5}{2}$ (C) 10 (D) 20 (E) 25

This is an example of a problem which requires realizing that $4a + 2b = 2(2a + b)$. Therefore, $4a + 2b = 2(2a + b) = 2(5) = 10$. The correct answer is (C).

2. If $16 \cdot 16 \cdot 16 = 8 \cdot 8 \cdot P$, then $P =$

- (A) 4 (B) 8 (C) 32 (D) 48 (E) 64

This question can be solved by several methods. A time-consuming method would be to multiply the three 16s and then divide the result by the product of 8 and 8. A quicker approach would be to find what additional factors are needed in the right side of the equation to match those in the left side. These are two 2s and a 16, the product of which is 64. Yet another method involves

solving for P as follows:

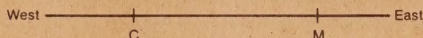
$$P = \frac{2}{8} \cdot \frac{2}{8} \cdot 16 = 2 \cdot 2 \cdot 16 = 64$$

The correct answer is (E).

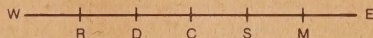
3. The town of Mason is located on Eagle Lake. The town of Canton is west of Mason. Sinclair is east of Canton, but west of Mason. Dexter is east of Richmond, but west of Sinclair and Canton. Assuming all these towns are in the United States, which town is farthest west?

(A) Mason (B) Dexter (C) Canton
(D) Sinclair (E) Richmond

For this kind of problem, drawing a diagram may help. In this case, a line can be effectively used to locate the relative position of each town. Start with the statement "The town of Canton is west of Mason" and, using abbreviations, draw the following:



From the remaining information, place the other towns in their correct order:



The final sketch shows that the town farthest west is Richmond (R) and the correct answer is (E).

4. If the average of seven x 's is 7, what is the average of fourteen x 's?

(A) $\frac{1}{7}$ (B) $\frac{1}{2}$ (C) 1 (D) 7 (E) 14

Don't get caught up in the wording of this problem which might lead you to choose (E) 14. The average of any number of equal numbers such as x is always x . Since you are given that the average of seven x 's is 7, it follows that $x = 7$ and that the average of fourteen x 's is also 7. The correct answer is (D).

5. If an asterisk (*) between two expressions indicates that the expression on the right exceeds the expression on the left by 1, which of the following is (are) true for all real numbers x ?

I. $x(x + 2) * (x + 1)^2$

II. $x^2 * (x + 1)^2$

III. $\frac{x}{y} * \frac{x + 1}{y + 1}$

(A) None (B) I only (C) II only
(D) III only (E) I and III

This kind of problem involves working with a newly defined symbol. One approach is to check the statements one at a time. Statement I reduces to $x^2 + 2x * x^2 + 2x + 1$, so the expression on the right does exceed the expression on the left by 1. Therefore, statement I is true. Statement II reduces to $x^2 * x^2 + 2x + 1$ so the right expression exceeds the left expression by $2x + 1$, which is not equal to 1 except when $x = 0$. This makes statement II false. Statement III is more difficult to check,

but you can verify by subtraction or by substituting numbers (for example, $x = 3$, $y = 5$), that the expression on the right does not exceed the expression on the left by 1. Therefore, statement III is false. The only true statement is I, so the correct answer is (B).

In a problem of this kind, if you are able to decide about only one or two statements, you can still eliminate some choices and guess among those remaining. For example, if you can conclude that I is true and II is false, then the correct answer is either (B) or (E) because these choices contain statement I.

6. If a car travels X kilometers of a trip in H hours, in how many hours can it travel the next Y kilometers at this rate?

(A) $\frac{XY}{H}$ (B) $\frac{HY}{X}$ (C) $\frac{HX}{Y}$ (D) $\frac{H + Y}{X}$ (E) $\frac{X + Y}{H}$

You can solve this problem by using ratios or by using the distance formula.

Using the ratio method, X kilometers is to H hours as Y kilometers is to $\square$ hours, where $\square$ represents the amount of time required to travel Y kilometers:

$$\frac{X}{H} = \frac{Y}{\square}$$

$$X \square = HY$$

$$\square = \frac{HY}{X}$$

The correct answer is (B).

7. If 90 percent of P is 30 percent of Q , then Q is what percent of P ?

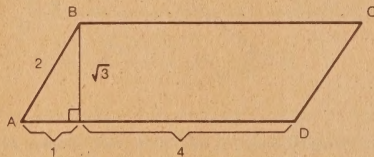
(A) 3% (B) 27% (C) 30% (D) 270% (E) 300%

Writing an algebraic equation for this percent problem not only simplifies the work, but also helps you to organize your thoughts. "90 percent of P is 30 percent of Q " can be written as $.90P = .30Q$ (or $\frac{9}{10}P = \frac{3}{10}Q$). "Q

is what percent of P " tells you to find $\frac{Q}{P}$ and express it

as a percent. $\frac{Q}{P} = 3$ and, therefore, Q is 300 percent of

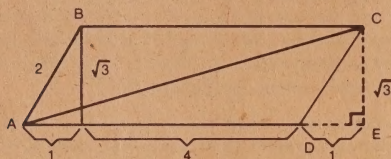
P and the correct answer is (E). (See pages 9-10 for review of percent.)



8. The figure above shows a piece of paper in the shape of a parallelogram with measurements as indicated. If the paper is tacked at its center to a flat surface and then rotated about its center, the points covered by the paper will be a circular region of diameter

(A) $\sqrt{3}$ (B) 2 (C) 5 (D) $\sqrt{28}$ (E) $\sqrt{39}$

The first step in solving the problem is to realize that the center of the parallelogram is the point of intersection of the two diagonals; thus, the diameter you are looking for is the length of the longer diagonal AC. One way to find AC is to think of the additional lines drawn as shown below.



The triangles at each end are congruent (equal in size and shape), so the length of DE and CE are 1 and $\sqrt{3}$, respectively. AEC is a right triangle; therefore, the Pythagorean Theorem can be used in solving the problem:

$$AC^2 = CE^2 + AE^2$$

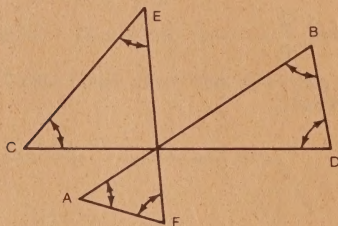
$$AC^2 = (\sqrt{3})^2 + (6)^2 = 3 + 36 = 39$$

The diameter AC is $\sqrt{39}$ and the correct answer is (E).

9. An accurate 12-hour clock shows 3 o'clock at a certain instant. Exactly 11,999,999,995 hours later, what time does the clock show?

(A) 5 o'clock (B) 7 o'clock (C) 8 o'clock
(D) 9 o'clock (E) 10 o'clock

Every 12 hours the clock will again show 3 o'clock. You want to know the remainder when 11,999,999,995 is divided by 12 to see how many hours to add to 3 o'clock. Because this division problem will be cumbersome, think about a shortcut. Twelve divides 12,000,000,000 with no remainder and 11,999,999,995 is 5 less than 12,000,000,000. After 12,000,000,000, the clock will show 3 o'clock, so 5 hours before 12,000,000,000, the clock will show 10 o'clock. The correct answer is (E).

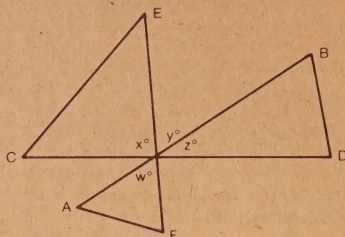


10. In the triangles above, if AB, CD, and EF are line segments, what is the sum of the measures of the six marked angles?

(A) 180° (B) 360° (C) 540° (D) 720°
(E) It cannot be determined from the information given.

This problem requires a creative problem-solving approach. One solution involves recognizing that the sum of the three unmarked angles in the triangles is 180.

This can be seen from the following figure:



Because CD is a line segment, the sum of angles x, y, and z is 180° . Also, $y = w$ because they are vertical angles. Therefore, $x + w + z = 180$. Since the sum of the measures of all angles in the three triangles is 540° ($3 \cdot 180^\circ$) and the sum of the unmarked angles of the triangles in the original figure equals 180° , it follows that the sum of the marked angles is $540^\circ - 180^\circ = 360^\circ$. The correct answer is (B). With this type of problem, if you do not reach a solution in a minute or so, go on to the next problem and return if time permits.

Quantitative Comparison Questions

Quantitative comparison questions emphasize the concepts of equalities, inequalities, and estimation. They generally involve less reading, take less time to answer, and require less computation than regular multiple-choice questions.

Directions: Each of the following questions consists of two quantities, one in Column A and one in Column B. You are to compare the two quantities and on the answer sheet blacken space

- A if the quantity in Column A is greater;
B if the quantity in Column B is greater;
C if the two quantities are equal;
D if the relationship cannot be determined from the information given.

- Notes:** 1. In certain questions, information concerning one or both of the quantities to be compared is centered above the two columns.
2. In a given question, a symbol that appears in both columns represents the same thing in Column A as it does in Column B.
3. Letters such as x, n, and k stand for real numbers.

EXAMPLES		Answers	
Column A	Column B		
E1. 2×6	$2 + 6$	☐ A ☐ B ☐ C ☐ D	(The answer is A because 12 is greater than 8.)
E2. $180 - x$	y	☐ A ☐ B ☐ C ☐ D	(The answer is C because $x + y = 180$, thereby making $180 - x$ equal to y .)
E3. $p - q$	$q - p$	☐ A ☐ B ☐ C ☐ D	(The answer is D because nothing is known about either p or q.)

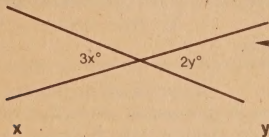
Quantitative comparison questions may not be as familiar to you as other types of questions. Therefore, give special attention to the directions ahead of time. To solve a quantitative comparison problem, you compare the quantities in the two columns and decide whether one quantity is greater than the other, whether the two quantities are equal, or whether the relationship cannot be determined from the information given. Remember that your answer should be:

- A if the quantity in Column A is greater;
- B if the quantity in Column B is greater;
- C if the two quantities are equal;
- D if the relationship cannot be determined from the information given.

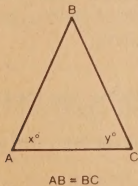
Problems are clearly separated and the *quantities to be compared are always on the same line as the number of the problem* (see example 2 below). Figures and additional information provided for some problems appear *above* the quantities to be compared. The following are some practice problems with explanations to help you understand this type of question.

	Column A	Column B
1.	$(37) \left(\frac{1}{43}\right) (58)$	$(59) \left(\frac{1}{43}\right) (37)$

Because the numbers in this problem are fairly large, it may save time to study the multipliers first before attempting the calculations. Note that (37) and $\left(\frac{1}{43}\right)$ appear in both quantities; thus, the only numbers left for you to compare are 58 and 59. Since $59 > 58$, the quantity on the right is greater and the correct answer is (B).

	Column A	Column B
2.	 x	y Quantities to be compared

To solve this problem, you need to recall that when two lines intersect, the vertical angles are equal. Therefore, $3x = 2y$ or $x = \frac{2}{3}y$, which implies that y is greater than x . The correct answer is (B). Note that the question asks for a comparison of x and y , not $3x$ and $2y$.

	Column A	Column B
3.	 x	y

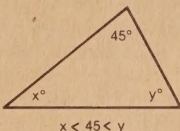
Since $AB = BC$, the angles opposite AB and BC are equal and, therefore, $x = y$. The correct answer is (C).

	Column A	Column B
4.	$x + 1$	$2x + 1$

Because both expressions contain a "1," the problem becomes one of comparing x with $2x$. When you compare algebraic expressions, a useful technique is to consider zero and negative numbers for possible values of the unknown.

- $2x > x$ for positive numbers
- $2x = x$ for zero
- $2x < x$ for negative numbers

The correct answer is (D), as the relationship cannot be determined from the information given. If you had been given that x was positive (that is, $x > 0$), the correct answer would have been B because $2x$ would be greater than x .

	Column A	Column B
5.	 $x < 45 < y$	90 Note: Figure is not drawn to scale.

Because the sum of the angles of a triangle is 180, $x + y + 45 = 180$ or $x + y = 135$. Since $x < 45$, it follows that $y > 90$. The answer is (A). In this problem you should not try to determine the answer from the appearance of the figure because the note indicates it is not drawn to scale.

	Column A	Column B
6.	$\frac{x^2 - 1}{x - 1}$	x

The condition $x \neq 1$ (read x is not equal to 1) is given because the algebraic fraction in column A is not defined for $x = 1$ (the denominator becomes zero). The solution of this problem involves simplifying the fraction in Column A as follows:

$$\frac{x^2 - 1}{x - 1} = \frac{(x + 1)(x - 1)}{x - 1} = x + 1$$

Therefore, the quantity in column A is equal to $x + 1$. Since $x + 1$ is always greater than x , the answer is (A).

	Column A	Column B
7.	Area of a triangle with altitude 4	Area of a triangle with base 5

To answer this question, you need to know how to find the area of a triangle. To find the area of a triangle, you

need to know the length of a base and the altitude to that base. You can't find the "area of a triangle with altitude 4" without knowing the base, so the area of such a triangle could be any number depending on the length of the base. Likewise, you can't find the "area of a triangle with base 5" without knowing the length of the altitude. Since you can't tell anything about the two areas, the correct answer is (D).

THE TEST OF STANDARD WRITTEN ENGLISH

The questions on the Test of Standard Written English evaluate your ability to recognize standard written English, the language of most college textbooks and the English you will probably be expected to use in the papers you write for most college courses. The TSWE tests some basic principles of grammar and usage such as agreement of subject and verb and of pronoun and antecedent, and it also deals with more complicated writing problems such as whether or not the comparisons made in a sentence are logical.

No question asks you to define grammatical terms or identify particular verb tenses or correct spelling or capitalization. In only a few questions are punctuation marks like the semicolon or the apostrophe important in arriving at an answer.

The best preparation for the TSWE is to read widely in works by skilled writers and, of course, to get regular practice in both analyzing good models of prose and in writing and rewriting your own prose. However, you should also find it helpful to read the materials in this publication and become familiar with the directions and the two types of multiple-choice questions used on the test.

The test begins with 25 usage questions, then has 15 sentence correction questions, and ends with 10 more usage questions.

Usage Questions

Directions: The following sentences contain problems in grammar, usage, diction (choice of words), and idiom. Some sentences are correct. No sentence contains more than one error.

You will find that the error, if there is one, is underlined and lettered. Assume that all other elements of the sentence are correct and cannot be changed. In choosing answers, follow the requirements of standard written English.

If there is an error, select the one underlined part that must be changed to make the sentence correct, and blacken the corresponding space on your answer sheet. If there is no error, blacken answer space E.

EXAMPLES:

I. He spoke bluntly and angrily to we spectators.

A B C D
No error
E

A B C D E

II. She works every day so that she would become

A B C
financially independent in her old age. No error
D E

A B C D E

Usage questions ask you to recognize writing that does not follow the conventions of standard written English. For example, they test the use of appropriate verb tenses, the agreement of pronoun with antecedent, the maintenance of parallel structure, and the use of idiomatic expressions. Each question consists of a sentence with four words or phrases underlined and lettered. You are to choose the one underlined part that must be changed to make the sentence acceptable in standard written English. Remember that the error must be one that you can correct by changing the underlined part. If you think that the sentence is all right as it is, mark the fifth choice, "No error." Read the entire sentence and consider each choice before you select your answer. Some of the sentences are correct, so don't hesitate to mark the "No error" choice if you can't find a mistake. Keep in mind, however, that errors of word choice as well as grammar or usage can be included.

Below are some sample usage questions and explanations of the correct answers.

1. Most people will find it easier to adjust to the metric system

A
if you become familiar with it before the changeover
B C
occurs. No error
D E

The problem in this sentence is that of shift in person. The writer begins talking about "most people" and then changes to "you." The sentence could be corrected by changing either "most people" or "you." However, "you" is underlined and "most people" is not, so, according to the directions, "you" is the only part of the sentence where the change can be made. The construction in choice (A) is acceptable, the preposition in choice (C) is the accepted idiom, and the number and tense of the verb in (D) agree. The correct answer is (B). The revised sentence would read "Most people will find it easier. . . if they become. . ."

2. Many travelers claim having seen the Abominable Snow-

A
man, but no one has proved that such a creature actually
B C D
exists. No error
E

The answer is (A). In the context of this sentence, the "having seen" is not acceptable. In standard written English, you should write "Many travelers claim to have seen. . ." Choice (B), "but," links the two parts of the sentence in a logical and appropriate way, and the expression at (C) and the adverb at (D) are also acceptable.

3. One of the activities of women's organizations

is to encourage projects that will make life easier for
working mothers. No error

Although the ideas expressed in the sentence might be conveyed with different words and expressions, the sentence contains no grammatical, idiomatic, logical, or structural errors. The answer is (E).

4. Holes in the skulls of people from certain ancient civilizations suggests that modern physicians are not the only

doctors who have attempted to operate on the brain.

The error is that of subject-verb agreement. Because the subject of the sentence, "Holes," is plural, the verb must also be plural; "suggests" should be changed to "suggest." Always check to see that the verb agrees with the subject, especially when the verb is separated from the subject by a phrase or a clause or when the verb comes before the subject. (B), (C), and (D) are all acceptable in standard written English. The answer is (A).

Sentence Correction Questions

Directions: In each of the following sentences, some part or all of the sentence is underlined. Under each sentence you will find five ways of phrasing the underlined part. Select the answer that produces the most effective sentence, one that is clear and exact, without awkwardness or ambiguity, and blacken the corresponding space on your answer sheet. In choosing answers, follow the requirements of standard written English, but do not make a choice that changes the meaning of the original sentence.

Answer (A) is always the same as the underlined part. Choose answer (A) if you think the original sentence needs no revision.

EXAMPLE:

Ms. Rose planning to teach a course in biology next summer.

- (A) planning (B) are planning
(C) have planned
(D) with a plan (E) plans

A B C D E

Many of these questions present complex faults in the logic or structure of a sentence, errors that require substantial rewriting. The directions ask you to select the *best* version of the sentence, so you must consider *effectiveness* of expression as well as correctness. Look at each of the five choices carefully before you select your answer. If you think more than one answer is acceptable, read each choice as part of the entire sentence; sometimes a choice makes sense by itself but not as part of the sentence. Some of the choices may be grammatically correct and logically and structurally consistent with the rest of the sentence, but they may still not be the correct response because they are wordy or awkward or because they lack force or emphasis.

Each of the choices is likely to deal with more than one writing problem. If you are not careful, you may pick an answer that corrects one problem but creates a new one. You are more likely to pick the correct response if you ask yourself questions like these: Is this sentence grammatically correct? Is it a complete sentence? Are the elements in the sentence parallel? Are the parts of the sentence linked in an appropriate manner? Are the ideas expressed or compared logically? Is the wording clear and concise?

Below are some sample sentence correction questions and explanations of the correct answers.

1. The shorter bearpaw snowshoes are the best choice if you are looking for an easy to lift and maneuver model.

- (A) an easy to lift and maneuver model
(B) a model that is easy to lift and maneuver
(C) an easy model as far as lifting and maneuvering goes
(D) a model with ease of lifting and also maneuver
(E) an easily lifted and also maneuvered model

The sentence tests directness and effectiveness of expression. Choices (A) and (E) are grammatically correct, but are not as well expressed as choice (B). Choice (C) is awkward. Choice (D) does not maintain parallel structure. Only choice (B) is clear, concise, and idiomatic.

2. Althea Gibson was the first Black American to win major tennis championships and played in the 1950s.

- (A) Althea Gibson was the first Black American to win major tennis championships and played in the 1950s.
(B) Althea Gibson, being the first Black American to win major tennis championships, and playing in the 1950s.
(C) Althea Gibson, playing in the 1950s, being the first Black American to win major tennis championships.
(D) Althea Gibson, who played in the 1950s, was the first Black American to win major tennis championships.
(E) Althea Gibson played in the 1950s, she was the first Black American to win major tennis championships.

When a sentence makes more than one statement, it is customary to indicate the relationship between these statements. If the statements are equal in importance, rank, or degree, the writer can use a conjunction like "and" or "but." This method of linking is called coordination. If one statement is to be empha-

sized more than the other, the writer can use a conjunction like "because" or "since" or other words like "who" or "that." This method of linking is called subordination. Sometimes, the intention of the writer determines which method is most appropriate. In the underlined sentence about Althea Gibson, the writer has used "and" to join two statements about the athlete. The sentence (and therefore choice A) is not effective, however, because "and" does not adequately convey the relationship between the two statements. A more interesting sentence would indicate which one of the statements was more important to the writer. The only choice that does so is (D). It is a well-constructed sentence, one with appropriate subordination and emphasis.

3. Placed in the time capsule, the scientists did so in the hope that the documents would be found by future generations.

- (A) Placed in the time capsule, the scientists did so in the hope that the documents
- (B) When they were placed in the time capsule, the scientists did it in the hope that the documents
- (C) By placing them in the time capsule, the hope of the scientists was that the documents
- (D) The scientists placed the documents in the time capsule in the hope that these papers
- (E) The placing of the documents in the time capsule by the scientists was in the hope that these papers

The primary problem with the sentence is that it contains a dangling modifier. A dangling modifier is a phrase, a clause, or an adjective that seems to modify a word that it was not intended to modify. Dangling modifiers often result in sentences that are ambiguous or illogical. Modifiers should usually be placed next to or close to the word they are intended to modify to avoid problems of ambiguity. Because of

the way the original sentence and choice (A) are constructed, the phrase "Placed in the time capsule" seems to modify "the scientists." However, this relationship makes no sense. The writer doesn't mean that the scientists were placed in the time capsule but that the scientists placed the documents in the time capsule. Choice (B) contains a similar error and adds to it by using the pronoun "it" without a clear antecedent. Choice (C) has a dangling modifier problem and is further weakened by the distance between "them" and the word it refers to, "documents." Choice (E) does not have a dangling modifier, but it uses the passive voice in an awkward manner and is unnecessarily wordy. The intended idea of the original sentence is expressed clearly and logically only in choice (D), the correct answer.

4. Being as it was a full moon, the tides were exceptionally high when the storm struck.

- (A) Being as it was a full moon
- (B) With the moon as full
- (C) Due to there being a full moon
- (D) Because the moon was full
- (E) The moon was full

This question presents problems in wording and in structure. Choices (A), (B), and (C) use expressions that are not ordinarily used in standard written English ("Being as it was," "With the moon as," "Due to there being"). Choice (E) joins two sentences with a comma, a method that is not acceptable in standard written English.

What is needed is some indication of the relationship between the first part of the sentence and the second. Choice (D) solves the problem—the word "because" clarifies the relationship by indicating that the situation described in the first part affected the situation described in the second. The answer is choice (D).

THE SAMPLE TEST

The sample test that follows is the edition of the SAT given on April 4, 1981 (in New York State on June 6, 1981). It includes only five of the six sections in the actual test. The experimental section, Section 4 in this edition, has been omitted because it contains questions that may be used in future editions of the SAT and does not count toward the scores. The sample test will be most helpful if you take it under conditions as close as possible to those of the actual test:

- Set aside two-and-one-half hours when you will not be interrupted, so that you can complete all of the test in one sitting.

- Sit at a desk with no other papers or books. You can't take a calculator, dictionary, other books, or notes into the test room.
- Have a kitchen timer or clock in front of you for timing yourself on the sections.
- Allow yourself only 30 minutes for each section of the test.
- Fill in the sample answer sheet on page 47 just as you would at a regular test.
- Read the instructions below. They are reprinted from the back cover of the test book. When you take the test, you will be asked to read them before you begin answering questions.
- After you finish the practice test, read "How to Score Your Sample Test," on page 44.

SCHOLASTIC APTITUDE TEST and Test of Standard Written English

You will have three hours to work on the questions in this test book, which is divided into six 30-minute sections. The supervisor will tell you when to begin and end each section. If you finish before time is called, you may check your work on that section, but you are not to work on any other section.

Do not worry if you are unable to finish a section or if there are some questions you cannot answer. Do not waste time puzzling over a question that seems too difficult for you. You should work as rapidly as you can without sacrificing accuracy.

Students often ask whether they should guess when they are uncertain about the answer to a question. Your test scores will be based on the number of questions you answer correctly minus a fraction of the number you answer incorrectly. Therefore, it is improbable that random or haphazard guessing will change your scores significantly. If you have some knowledge of a question, you may be able to eliminate one or more of the answer choices as wrong. It is generally to your advantage to guess which of the remaining choices is correct. Remember, however, not to spend too much time on any one question.

Mark all your answers on the separate answer sheet. Mark only one answer for each question. Since the answer sheet will be machine scored, be sure that each mark is dark and that it completely fills the answer space. In each section of the answer sheet, there are spaces to answer 50 questions. When there are fewer than 50 questions in a section of your test, mark only the spaces that correspond to the question numbers. Do not make stray marks on the answer sheet. If you erase, do so completely, because an incomplete erasure may be scored as an intended response.

You may use the test book for scratchwork, but you will not receive credit for information written there.

DO NOT OPEN THIS BOOK UNTIL THE SUPERVISOR TELLS YOU TO DO SO.

SECTION 1

Time—30 minutes

45 QUESTIONS

For each question in this section, choose the best answer and blacken the corresponding space on the answer sheet.

Each question below consists of a word in capital letters, followed by five lettered words or phrases. Choose the word or phrase that is most nearly opposite in meaning to the word in capital letters. Since some of the questions require you to distinguish fine shades of meaning, consider all the choices before deciding which is best.

Example:

GOOD: (A) sour (B) bad (C) red
(D) hot (E) ugly

Ⓐ ● Ⓑ Ⓒ Ⓓ

1. BAN: (A) borrow (B) regret
(C) permit (D) conquer (E) exaggerate
2. COMPRESSION: (A) equality (B) expansion
(C) exposure (D) endurance (E) excitement
3. FRAUDULENT: (A) dynamic (B) masterly
(C) possible (D) genuine (E) abundant
4. PARASITE: (A) expert (B) imposter
(C) instigator (D) self-assured snob
(E) self-sufficient individual
5. SPARSE: (A) thick (B) tidy
(C) wealthy (D) round (E) sticky
6. DENOUNCE: (A) overstate (B) acclaim
(C) destroy (D) refuse (E) hasten
7. FLY-BY-NIGHT: (A) unbalanced (B) moderate
(C) permanent (D) incredible (E) modern
8. STERILE: (A) venal (B) productive
(C) generous (D) variegated (E) unalloyed
9. REJOICE: (A) defend against (B) shrug off
(C) criticize (D) bemoan (E) discriminate
10. FANATICISM: (A) optimism (B) hedonism
(C) penitence (D) didacticism (E) apathy
11. VESTIGIAL: (A) fully developed
(B) publicly announced (C) offensive
(D) provincial (E) miraculous
12. DIVERT: (A) bore (B) rescue (C) espouse
(D) judge fairly (E) question relentlessly
13. HACKNEYED: (A) integrated (B) appealing
(C) inventive (D) acceptable (E) improper
14. ALACRITY: (A) indolence (B) bravery
(C) wisdom (D) pungency (E) retention
15. BURGEON: (A) fail to prove
(B) shrivel and die (C) pursue and capture
(D) disobey regulations (E) speak incoherently

Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are five lettered words or sets of words. Choose the word or set of words that best fits the meaning of the sentence as a whole.

Example:

Although its publicity has been ---, the film itself is intelligent, well-acted, handsomely produced, and altogether ---.

- (A) tasteless, respectable (B) extensive, moderate
(C) sophisticated, amateur (D) risqué, crude
(E) perfect, spectacular

● Ⓐ Ⓑ Ⓒ Ⓓ

16. Rather than --- wagon trains and --- the pioneer's movement westward, many American Indians acted as guides and companions.
(A) encountering, helping
(B) seeking, encouraging
(C) attacking, hindering
(D) welcoming, allowing
(E) repulsing, following
17. Although Ricardo looked tired, he was enormously --- by Maria's election, a victory they had both labored so hard for.
(A) elated (B) baffled (C) fatigued
(D) surprised (E) exasperated
18. The earth's atmosphere --- surface temperatures by distributing heat absorbed on the sunlit side to the side in shadow.
(A) warms (B) resists (C) generates
(D) moderates (E) amasses
19. Professor Greene's ---, detailed, and lucid lectures match the gravity of her subject.
(A) blithe (B) studious (C) jaundiced
(D) obscure (E) uproarious
20. It would seem that the --- of science, the building and making of things, have stirred the American imagination, but that the --- roots of such activities have not.
(A) applications, theoretical
(B) hypotheses, practical
(C) formulas, actual
(D) offshoots, extrinsic
(E) products, future

GO ON TO THE NEXT PAGE

Each passage below is followed by questions based on its content. Answer all questions following a passage on the basis of what is stated or implied in that passage.

(The passages for this test have been adapted from published material. The ideas contained in them do not necessarily represent the opinions of the College Board or Educational Testing Service.)

(This passage was written in 1961.)

The classics are the great works of human intelligence that, whether produced in Israel, Greece, Rome, or England, have demonstrated the capacity for being understood over a long period of time and in a variety of places. They introduce the student to the significant ideas common to Western civilization. But most students are so busy learning the language of the classics that they never become acquainted with the ideas in them.

I know not how many Gauls Caesar slaughtered. But I know that learning Latin from the *Gallic Wars* has killed the interest of generations of Americans in the classics. More than sixty years ago, a committee of educational consultants affirmed that the *Gallic Wars* did not belong in the classroom. According to the committee, "The book is altogether too difficult for beginners; it is too military in content to be generally interesting. Its vocabulary is too restricted to marches, sieges, and battles to afford the best introduction to subsequent reading." Yet, of the glory that was Greece and Rome, this is what high school students first encounter. And since they are forced to further waste time by reading it in the original, this is often their only encounter.

The stubborn attachment to Caesar springs from an underlying insistence that the ultimate purpose of teaching the classics is to teach Latin and that therefore the simple style of Caesar is appropriate. For the same reason, *Beowulf* has been set as an impenetrable barrier to a love of English literature by those who believe that the study of English literature must begin with the knowledge of the Anglo-Saxon language.

However, if we use the classics to offer a glimpse of the seminal ideas of Western culture, quite different texts can be held forth. All students can read some Aristophanes or Thucydides or Chaucer with interest. Inclusive lists are of no importance, for these texts should be the beginning, rather than the sum, of their reading. And they should begin by reading the good English translations that are available. No translation is, of course, the equivalent of the original. But the question is not whether *The Clouds* should be read in Greek or in English; the question is whether it should be read in English or not read at all. It is more likely that a few students will be drawn to study the language through knowledge of its literature than that any will be drawn to the literature through drill in the language.

21. Which of the following best expresses the main idea of the passage?

- (A) The *Gallic Wars* is more appropriate today than it was many years ago.
- (B) Most students are more interested in learning languages than in learning history.
- (C) The place of the classics in high school has been greatly overrated.
- (D) Good English translations of the classics are usually stylistically superior to the originals.
- (E) The classics should be used in the high school to present meaningful ideas.

22. It can be inferred that the committee of educational consultants mentioned in the passage recommended that

- (A) Latin be studied in the high schools, but from a text other than Caesar's *Gallic Wars*
- (B) Caesar's *Gallic Wars* continue to be studied in American schools, but from a good English translation
- (C) the study of the classics be dropped from American school curricula
- (D) Latin be studied from Caesar's *Gallic Wars* because the style, if not the content, is appropriate for beginners
- (E) an abridged version of the *Gallic Wars*, omitting much of the military content, be published

23. Which of the following would the author probably recommend as the best approach to the study of classics in American high schools?

- (A) The classics should not be studied in any form.
- (B) The classics should be studied in the original language, but a restricted vocabulary should be used.
- (C) An appreciation of the classics should grow out of a thorough knowledge of them in their original languages.
- (D) The classics should be read in English translations.
- (E) The classics should be studied in relation to the literary theories of the time in which each work was written.

24. The author refers to Aristophanes and Thucydides as examples of classical authors who are

- (A) included in most high school courses
- (B) of intrinsic interest to young people
- (C) destroyed by awkward translations
- (D) of no interest because of their difficulty
- (E) difficult to relate to the rest of the literature curriculum

25. According to the author, the use of the classics in high schools was primarily based on the instructor's desire to

- (A) stimulate students' interest in languages
- (B) teach students self-discipline and promote a methodical approach to learning
- (C) develop in students a familiarity with a particular language
- (D) give young people an appreciation of contemporary achievements
- (E) familiarize students with the important names in Western literature

GO ON TO THE NEXT PAGE

The renewed interest in ragtime is one of the most curious cases of changing musical taste in recent years. The resurgence began in 1970 when a recording of eight rags by the inimitable Scott Joplin appeared.

This recording was not a rediscovery of forgotten material, for ragtime had remained popular with jazz and Dixieland audiences. Jazz musicians had altered the steady beat of the music, adding syncopations and, in the process, eliminating the contrasts that highlighted the melodies; Dixieland musicians had done the pieces very fast, damaging the lyrical qualities. But in the 1970 recording, the music was played exactly as Joplin had written it. What emerged was a delicate music, with graceful melodies and compelling rhythms, that captivated a large new audience. Since then, modified ragtime recordings have inundated the market.

Ragtime was created during the last years of the nineteenth century by itinerant black musicians of the Midwest out of previously disparate elements. From the minstrel song they took the melodic style characteristic of banjo accompaniment; from the march they took the bass figures and rhythms; from the cakewalk they took a mock-serious combination of stately procession and energetic improvisation.

Present-day ragtime enthusiasts seem to delight in emphasizing the difficulties that faced ragtime composers. However, to cast a man such as Joplin as an "all-but-forgotten black American genius" not only ignores important elements of Joplin's life, but also misrepresents the development of popular music in the twentieth century. Within months of the publication of "Maple Leaf Rag," Joplin became a rich and famous man and remained so until his death. Also, the relative decline of ragtime cannot be blamed on hostility to black culture, since another form of black music, jazz, became the new rage when the original ragtime boom receded.

The attempt to assimilate ragtime into the romantic myth of the artist neglected by society can be seen as part of an effort to recast ragtime as "serious" or "classical" music. Admittedly, of all the forms of popular music, ragtime is the most amenable to "classical" treatment. Unlike jazz and folk music, ragtime is not improvisatory. It is fully written out, with no reliance on aural tradition. And unlike the work of the popular songwriters, ragtime is written for the solo piano—the preeminent classical instrument. Nevertheless, it is also true that the rag is a modest form, with an elementary structure and technique. Burdening ragtime with an unnecessary load of musical pretension and political meaning may sink this music into a deeper oblivion than the relative neglect from which it has been rescued.

26. According to the passage, Dixieland musicians altered the original style of ragtime music by
 - (A) highlighting the melodies
 - (B) adding syncopations
 - (C) playing the music very fast
 - (D) giving the music a steady beat
 - (E) omitting the lyrics of the music
27. By the statement "previously disparate elements" (lines 22-23), the author is referring to the fact that
 - (A) blacks had never before organized to develop an authentic style of music
 - (B) the source of a particular style of music had never before been attributed to a particular region of the country
 - (C) ragtime was the first black music to attract a large and varied audience
 - (D) ragtime was the first black music in which the piano rather than the banjo was the dominant instrument
 - (E) ragtime was created by mixing various aspects of other types of music
28. It can be inferred from the passage that, when it was written, Scott Joplin's music was
 - (A) overrated by critics
 - (B) dismissed as unprofitable
 - (C) ignored by audiences
 - (D) acknowledged as unique and praiseworthy
 - (E) considered classical rather than popular
29. With which of the following statements regarding ragtime would the author probably agree?
 - I. What is best in ragtime may be lost in the effort to make it something it is not.
 - II. Joplin's ragtime did more than any other style of music to revolutionize American music.
 - III. Ragtime differs in some important ways from most other popular music.
 - (A) I only
 - (B) I and II only
 - (C) I and III only
 - (D) II and III only
 - (E) I, II, and III
30. In developing the passage, the author does all of the following EXCEPT
 - (A) present evidence from other people to support the views expressed
 - (B) give historical information regarding the origins of ragtime music
 - (C) attempt to convey a feeling of the nature of ragtime music
 - (D) offer statements to refute certain aspects of the opposing point of view
 - (E) describe a potential consequence of the opposing point of view

Select the word or set of words that best completes each of the following sentences.

31. Many of the officers were unsympathetic, even ----, to their new and inexperienced commander.
(A) lukewarm (B) indulgent
(C) servile (D) hostile (E) impartial
32. The rural Republican and the urban Democrat were immensely different, and the ---- that separated them was not ---- successfully during the postwar era.
(A) bulwark. .built
(B) goal. .achieved
(C) gulf. .bridged
(D) economy. .widened
(E) electorate. .enfranchised
33. Whereas his predecessors were careful to stay within the boundaries of factual evidence, Dr. Artman delivered an address that was ---- by pretentious and ---- theorizing.
(A) marred. .irresponsible
(B) undermined. .unassuming
(C) supported. .flawless
(D) refuted. .unverifiable
(E) represented. .unquestionable
34. Because of their extremely simple structures, viruses have proved invaluable to those scientists who are interested in constructing ---- for the larger, more complex molecules.
(A) a cure (B) a response (C) an edifice
(D) a universe (E) a paradigm
35. Many early Americans, for all their dislike of monarchy, firmly believed in ---- society.
(A) a democratic (B) an idealistic
(C) a stratified (D) a historic (E) a flexible

Each question below consists of a related pair of words or phrases, followed by five lettered pairs of words or phrases. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair.

Example:

YAWN:BOREDOM :: (A) dream:sleep
(B) anger:madness (C) smile:amusement
(D) face:expression (E) impatience:rebellion

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

36. FOOD:STARVATION :: (A) liquor:inebriation
(B) water:saturation (C) heat:inflammation
(D) privacy:isolation (E) air:suffocation
37. TAPE RECORDER:EAR :: (A) radio:antenna
(B) camera:eye (C) phonograph:volume
(D) journal:hand (E) telephone:speech
38. SUMMONS:ATTENDANCE ::
(A) allowance:money (B) bill:payment
(C) purchase:article (D) question:examination
(E) continuation:action
39. HOPE:DESPAIRING :: (A) confidence:friendly
(B) respect:governing (C) wittiness:humorous
(D) jollity:gloomy (E) unconcern:poised
40. ACT:TRAGEDY :: (A) stanza:poem
(B) palette:artist (C) inventor:machine
(D) gate:fence (E) cover:book
41. ENIGMA:MYSTERIOUS ::
(A) beginning:vague
(B) decision:cautious
(C) memory:forgotten
(D) meeting place:random
(E) turning point:significant
42. WHELP:DOG :: (A) mule:horse
(B) kitten:pet (C) child:human being
(D) criminal:community (E) school:fish
43. ANNOY:ABUSE :: (A) alter:change
(B) encourage:prod (C) clamor:silence
(D) violate:revolt (E) consider:discover
44. PARTICLE:AGGREGATE :: (A) athlete:rivalry
(B) molecule:surface (C) asteroid:planet
(D) animal:herd (E) motor:power
45. UNWITTING:INTENTION ::
(A) inconspicuous:strategy
(B) alone:assistance
(C) lavish:expense
(D) impractical:explanation
(E) futile:disappointment

S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.
DO NOT WORK ON ANY OTHER SECTION IN THE TEST.

SECTION 2

Time—30 minutes

25 QUESTIONS

In this section solve each problem, using any available space on the page for scratchwork. Then decide which is the best of the choices given and blacken the corresponding space on the answer sheet.

The following information is for your reference in solving some of the problems.

Circle of radius r : Area $= \pi r^2$; Circumference $= 2\pi r$

The number of degrees of arc in a circle is 360.

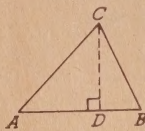
The measure in degrees of a straight angle is 180.

Definitions of symbols:

$=$ is equal to	$\leq$ is less than or equal to
$\neq$ is unequal to	$\geq$ is greater than or equal to
$<$ is less than	$\parallel$ is parallel to
$>$ is greater than	$\perp$ is perpendicular to

Triangle: The sum of the measures in degrees of the angles of a triangle is 180.

If $\angle CDA$ is a right angle, then

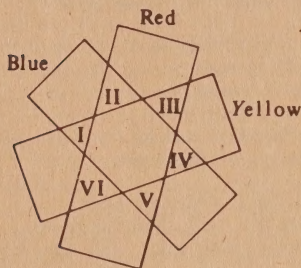


$$(1) \text{ area of } \triangle ABC = \frac{AB \times CD}{2}$$

$$(2) AC^2 = AD^2 + DC^2$$

Note: Figures which accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated. All numbers used are real numbers.

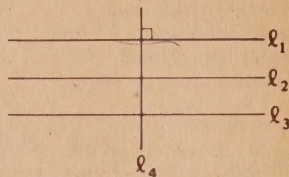
1. If $x^2 - 1 = y$ and $x = 3$, then $y^2 =$
 (A) 81 (B) 64 (C) 9 (D) 8 (E) 4



Red + Blue : Purple
 Red + Yellow : Orange
 Blue + Yellow : Green

2. The figure above shows strips of colored glass that overlap to form other colors as shown by the color chart. Which two labeled triangular regions would be green?

- (A) I and III
 (B) I and IV
 (C) II and V
 (D) III and VI
 (E) IV and VI



3. In the figure above, if $l_1 \parallel l_2$, $l_2 \parallel l_3$, and $l_1 \perp l_4$, which of the following statements must be true?

- I. $l_1 \parallel l_3$
 II. $l_2 \perp l_4$
 III. $l_3 \perp l_4$

- (A) None (B) I only (C) I and II only
 (D) II and III only (E) I, II, and III

4. If $100 \leq k \leq 400$ and k is a multiple of 5, 6, 7, and 10, then $k =$

- (A) 105
 (B) 150
 (C) 210
 (D) 300
 (E) 350

66 30 2/100

GO ON TO THE NEXT PAGE

5. In a restaurant where the sales tax on a \$4.00 lunch is \$0.24, what will be the sales tax due on a \$15.00 dinner?

(A) \$0.60
(B) \$0.75
(C) \$0.90
(D) \$1.20
(E) \$1.74

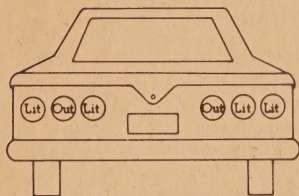
1st Row	0 1 0
2nd Row	0 1 1 0
3rd Row	0 1 2 1 0
4th Row	0 1 3 3 1 0
5th Row	0 1 4 6 4 1 0
6th Row	0 1 5 10 10 5 1 0

6. The nonzero numbers above form a triangular array. Beginning with the second row, each nonzero number in a row is the sum of the two numbers nearest to it in the row immediately above. If a sixth row is added in this fashion, what will be the sum of all the numbers in the sixth row?

(A) 8 (B) 10 (C) 16 (D) 32 (E) 64

7. If x is a positive integer and $x^2 + x = n$, which of the following could be the value of n ?

(A) 14
(B) 15
(C) 18
(D) 23
(E) 30



8. If one more of the lit signals on the rear of the car above were out, what per cent of all the rear signals would then be lit?

(A) 25% (B) $33\frac{1}{3}\%$ (C) 50%
(D) $66\frac{2}{3}\%$ (E) 75%

9. If $111,111 + N = 181,111$, then $N =$

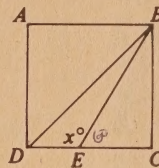
(A) 7×10^3
(B) 7×10^4
(C) 7×10^5
(D) 8×10^4
(E) 9×10^4

10. In the United States in a certain year, food production per person was 15 per cent greater than food consumption per person. If the average daily consumption per person in the United States in that year was 3,000 calories, what was the average daily production (in calories) per person in that year?

(A) 3,200 (B) 3,450 (C) 3,600
(D) 3,850 (E) 4,500

11. 0.06 is the ratio of 6 to

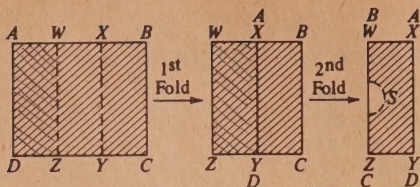
(A) 1,000 (B) 100 (C) 10
(D) $\frac{1}{10}$ (E) $\frac{1}{100}$



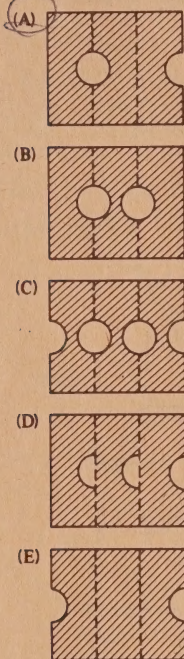
12. In the figure above, $ABCD$ is a square. If $BE = 2EC$, then $x =$

(A) 100 (B) 110 (C) 120
(D) 150 (E) 160

GO ON TO THE NEXT PAGE



13. In the figure above, a rectangular piece of paper $ABCD$ is folded along dotted line WZ so that A is on top of X and D is on top of Y and then folded along XY so that B is on top of W and C is on top of Z . A small semicircle S with diameter on BC is cut out of the folded paper. If the paper is unfolded, which of the following could be the result?



14. If $5x - 3y = 8$ and $x = \frac{7y}{5}$, then $y =$

- (A) $\frac{5}{4}$
(B) $\frac{8}{5}$
(C) 2
(D) $\frac{8}{3}$
(E) 4

$$\begin{aligned} 5\left(\frac{7y}{5} - 3y\right) &= 8 \\ 7y - 15y &= 40 \\ -8y &= 40 \\ \frac{-8y}{-8} &= \frac{40}{-8} \\ y &= -5 \end{aligned}$$

15. Amy is twice as old as Bill. Five years ago she was 3 times as old as Bill was then. How old is Bill now?

- (A) 20
(B) 15
(C) 10
(D) 5
(E) It cannot be determined from the information given.

16. $(3x^2 - 4x + 7) - (2x + 1)(x - 5) =$

- (A) $x^2 + 5x + 12$
(B) $x^2 - 5x + 12$
(C) $x^2 - 5x + 2$
(D) $5x^2 - 13x + 2$
(E) $5x^2 + 13x + 12$

17. In $\triangle ABC$, the ratio of the length of side AB to the perimeter is 1 to 3. What is the ratio of the length of side BC to the perimeter?

- (A) $\frac{1}{4}$
(B) $\frac{1}{3}$
(C) $\frac{5}{12}$
(D) $\frac{1}{2}$
(E) It cannot be determined from the information given.

18. $\frac{(N-2)(N-4)(N-6)(N-8)-1}{2}$ is an integer if N is equal to

- (A) 1 only
(B) 2 only
(C) 9 only
(D) any odd integer
(E) any even integer

GO ON TO THE NEXT PAGE



Handwritten notes: $A = \pi r^2$, $9\pi = \pi r^2$, $r = 3$

19. Three equal semicircles are drawn on a diameter of the circle with center O as shown above. If the area of circle O is 9π , then the area of the shaded region is

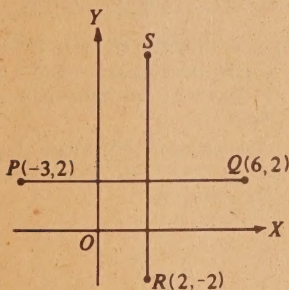
(A) $\frac{7\pi}{2}$ (B) 4π (C) $\frac{9\pi}{2}$ (D) 5π (E) $\frac{11\pi}{2}$

20. If each angle of quadrilateral $ABCD$ measures less than 180° and if 3 of its angles each measure x° , which of the following must be true?

(A) $x > 60$
 (B) $x = 60$
 (C) $x < 60$
 (D) $ABCD$ is a parallelogram but not a square.
 (E) $ABCD$ is a square.

21. The set P consists of all numbers which are the sum of 3 consecutive prime numbers. For example, the number 109 is in P , since $31 + 37 + 41 = 109$. The least prime number in P is

(A) 13
 (B) 17
 (C) 19
 (D) 23
 (E) 31



22. The coordinates of points P , Q , and R are shown in the figure above. If $PQ = RS$ and $PQ \perp RS$, what are the coordinates of S ?

(A) (2, 6) (B) (2, 7) (C) (2, 8)
 (D) (2, 9) (E) (7, 2)

23. How many minutes will it take a rocket to travel 4,000 miles if its average rate is 100 miles every t seconds?

(A) $\frac{2t}{3}$

(B) $\frac{3t}{2}$

(C) $\frac{2}{3t}$

(D) $40t$

(E) $2,400t$

24. If the average of x , y , and 80 is 6 more than the average of y , z , and 80, what is the value of $x - z$?

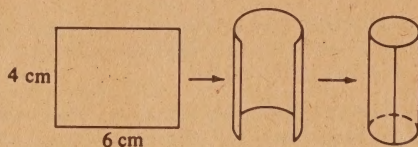
(A) 2

(B) 3

(C) 6

(D) 18

(E) It cannot be determined from the information given.



25. The figure above shows how a rectangular piece of paper is rolled to form a cylindrical tube. If it is assumed that the 4-centimeter sides of the rectangle meet with no overlap, what is the area, in square centimeters, of the circular base region enclosed?

(A) 16π

(B) 9π

(C) 4π

(D) $\frac{9}{\pi}$

(E) $\frac{4}{\pi}$

S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.
 DO NOT WORK ON ANY OTHER SECTION IN THE TEST.

SECTION 3

Time—30 minutes

40 QUESTIONS

For each question in this section, choose the best answer and blacken the corresponding space on the answer sheet.

Each question below consists of a word in capital letters, followed by five lettered words or phrases. Choose the word or phrase that is most nearly opposite in meaning to the word in capital letters. Since some of the questions require you to distinguish fine shades of meaning, consider all the choices before deciding which is best.

Example:

GOOD: (A) sour (B) bad (C) red
(D) hot (E) ugly

☐ A ☒ B ☐ C ☐ D ☐ E

1. ORDINARY: (A) numerical (B) rational
(C) impolite (D) staunch (E) abnormal
2. ATHEIST: (A) believer (B) scholar
(C) recluse (D) expatriate (E) pauper
3. FLICKER: (A) rise slowly (B) burn steadily
(C) warm completely (D) fume (E) collide
4. SERRATED: (A) undervalued (B) aggressive
(C) smooth and even (D) loose and flexible
(E) supremely confident
5. COSMOPOLITAN: (A) indecisive (B) ineffectual
(C) antagonistic (D) parochial (E) deferential
6. HYPOCRITICAL: (A) guileless (B) eccentric
(C) perspicacious (D) untrustworthy
(E) sagacious
7. ACCOLADE: (A) appetizer (B) censure
(C) recoil (D) seizure (E) referendum
8. PROFOUND:
(A) remove from consideration
(B) defend without evidence
(C) avoid without reason
(D) view with humility
(E) rescue from imprisonment
9. EBULLIENT: (A) staid (B) anxious
(C) feminine (D) unique (E) respectful
10. EXCULPATE: (A) require (B) yield
(C) reinstate (D) vivify (E) convict

Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are five lettered words or sets of words. Choose the word or set of words that best fits the meaning of the sentence as a whole.

Example:

Although its publicity has been ---, the film itself is intelligent, well-acted, handsomely produced, and altogether ---.

- (A) tasteless. .respectable (B) extensive. .moderate
(C) sophisticated. .amateur (D) risqué. .crude
(E) perfect. .spectacular

☒ A ☐ B ☐ C ☐ D ☐ E

11. As tourism and industry develop along the shores of the Gulf of California, it is possible that the increased human --- may drive the gray whales from their --- calving sites.
(A) access. .forsaken
(B) knowledge. .impending
(C) activity. .preferred
(D) indifference. .destined
(E) concern. .despoiled
12. Because of its immense scope, critics have rightly referred to the book as the most --- examination of minority concerns in the United States ever written.
(A) deficient (B) intuitive (C) obscure
(D) unaspiring (E) comprehensive
13. The --- of personality that strikes us in Julia Cameron's best pictures gives her work a coherence that is --- in the work of less accomplished personal photographers.
(A) idea. .compounded (B) image. .implied
(C) theory. .evolving (D) force. .lacking
(E) feeling. .restrained

GO ON TO THE NEXT PAGE

14. In addition to the traditional functions of collecting and displaying, a museum establishes the official ---- of an artist's works, ---- them a prestige unattainable in a commercial showcase.

(A) utility. .proposing for
(B) subjectivity. .sharing with
(C) style. .conceding to
(D) importance. .conferring on
(E) destiny. .diverting from

15. Although Spalding ---- the importance of the physical necessities of life, her most successful endeavor was the ---- of the condition of the impoverished.

(A) deprecated. .alleviation
(B) emphasized. .investigation
(C) accentuated. .amelioration
(D) epitomized. .delineation
(E) disregarded. .desecration

Each question below consists of a related pair of words or phrases, followed by five lettered pairs of words or phrases. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair.

Example:

YAWN:BOREDOM :: (A) dream:sleep
(B) anger:madness (C) smile:amusement
(D) face:expression (E) impatience:rebellion

A B C D E

16. SANDBOX:PLAY ::

(A) picture:see (B) office:work
(C) library:publish (D) restaurant:guide
(E) kindergarten:manipulate

17. TENANT:RENT :: (A) salesperson:commission

(B) performer:ticket (C) investor:interest
(D) client:fee (E) professor:tuition

18. DAWN:DAY :: (A) moon:night (B) star:sun
(C) week:year (D) birth:life (E) beginning:end

19. Mallet:POLO :: (A) putter:club
(B) bat:baseball (C) field:football
(D) puck:hockey (E) lane:bowling

20. TERRESTRIAL:LUNG :: (A) marsupial:pouch
(B) floral:root (C) aquatic:gill
(D) perennial:seed (E) canine:mouth

21. DEFAME:REPUTATION ::
(A) demoralize:misery (B) challenge:opinion
(C) promote:talent (D) disfigure:appearance
(E) jeopardize:peril

22. NEUTER:GENDER :: (A) sincere:truth
(B) uniform:errors (C) futile:hindrance
(D) nimble:energy (E) destitute:possessions

23. HONE:BLADE :: (A) cut:scissors
(B) strike:bell (C) reduce:fat
(D) focus:image (E) flatten:hill

24. DEBATE:FORENSIC ::

(A) decathlon:athletic
(B) applause:dramatic
(C) controversy:scientific
(D) anthology:descriptive
(E) diagnosis:experimental

25. ANNEX:BUILDING :: (A) tenure:office
(B) rider:document (C) lease:apartment
(D) chapter:text (E) limb:extremity

GO ON TO THE NEXT PAGE

Each passage below is followed by questions based on its content. Answer all questions following a passage on the basis of what is stated or implied in that passage.

(The passages for this test have been adapted from published material. The ideas contained in them do not necessarily represent the opinions of the College Board or Educational Testing Service.)

One of the favorite operations of the alchemists was a process they called "calcining." It consisted of placing a mineral or a metal into a crucible and heating it until it was completely converted into a powdery solid. Since this powdery solid evidently resisted prolonged heating better than anything else, it was believed to have special "virtues" and was called "calx," as for example, the calx of arsenic. Calcining, incidentally, provided further proof of the superiority of gold because gold did not have a calx.

In 1489 a German alchemist, Eck von Sulzbach, made the startling discovery that the calx of a metal weighed more than the metal before calcining. The only explanation he could think of was that a "ghost" had come from somewhere and moved into the calx, thereby increasing its weight.

We now know that Eck von Sulzbach had come close to the truth. Calcining a metal means, in present-day terminology, to oxidize it with the oxygen in the atmosphere, and naturally the compound of metal plus oxygen will weigh more than the metal itself. But the fifteenth-century alchemist could not arrive at this conclusion because Aristotle, whose word was still undisputed, had said that air was an element that did not combine with metals. However, the time was not far off when this statement was to be questioned.

26. The passage primarily answers which of the following questions?

- (A) Why was calcining a favorite process of the alchemists?
- (B) Who was Eck von Sulzbach and how has he influenced the progress of science?
- (C) To what extent were alchemists influenced by the teachings of Aristotle?
- (D) What is calcining and how did the alchemists interpret it?
- (E) How did other alchemists react to Eck von Sulzbach's discovery of a "ghost"?

27. According to the passage, the calx of two ounces of arsenic will weigh

- (A) less than one ounce
- (B) one ounce
- (C) one and one-half ounces
- (D) two ounces
- (E) more than two ounces

28. The last sentence of the passage suggests that, after the fifteenth century, some alchemists began to wonder whether

- (A) the calx of a metal had any special "virtues"
- (B) air or some part of it could combine with metals
- (C) Aristotle's description of gold was accurate
- (D) calcining increased or decreased the value of a metal
- (E) the calx of metal really weighed more than the metal did before calcining

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"That's right. My suitcases were on the gangplank and there was Annie on the quay. That was the first time I thought of her at all. Annie is my wife, but she wasn't then. I looked at her in the pouring rain with tears in her eyes and the porters hitting up against her. I got to thinking of the things I'd said to her one time or another. You know the things you're apt to say to a girl?"

"I do," said the young man.

"I tried to get back for a few last words with her but I had to keep standing aside to let people pass.

"Come on up, Manny," shouted the lads from the deck.

"Goodbye, Manny," Annie called in a little voice."

"You didn't go down!"

"Down I went. The boys called me to come back but the wind blew their words away.

"I knew you'd come to your senses," Annie said. "Where's your fiddle?"

"By God, if I hadn't left the fiddle on deck! I shouted at Timmy Coyne—that's the fellow next to me in the photo. He played the piano in our band, by the way.

"The fiddle!" I shouted against the noise and confusion of the boat pulling away. Timmy right away ducks down then ups and rests the fiddle case on the rails. 'Catch!' he shouts.

"A fellow in the crowd next to me leaps to catch it but you know how slippery them wooden boards can be? Well, down slips the fellow and fiddle and case and even the little bow were smashed to smithereens. You should have heard the crowd laughing."

"What did Annie say?"

"It's the hand of God," she said."

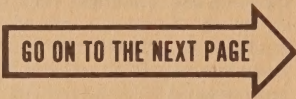
29. In the context of the passage, the phrase "That's right" (line 1) suggests primarily that
- (A) Manny and the person he is addressing are in complete agreement
 - (B) the conversation we are about to read is already in progress
 - (C) Manny is eager to recount his experience to whoever will listen
 - (D) one story has been told and another is about to begin
 - (E) Manny wants his listener to believe what he has told him

30. It can be inferred that all of the following contributed to Manny's decision to rejoin Annie on the dock EXCEPT

- (A) Annie's tears
- (B) the sight of Annie in the rain
- (C) the sight of Annie jostled by porters
- (D) the weakness of Annie's voice saying goodbye
- (E) the attitude of the men on the deck toward Annie

31. In the context of the passage, the fiddle is representative of all of the following EXCEPT

- (A) freedom
- (B) youth
- (C) religious faith
- (D) creative imagination
- (E) unexplored possibility

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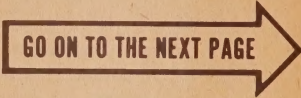
Those who think of evolution as merely a process of adaptation to particular environments regard the emergence of life from the water as having been made possible by its adaptation to the dry environment outside. Though this hypothesis is not false in itself, it represents too short a view. In the long view, evolution has been toward an ever-increasing independence of the natural external environment, whatever it may be.

Let me give an example. To this day, the development of a fertilized animal cell through the embryonic stage can take place only in a liquid environment. Therefore, the first organisms to emerge on land, represented today by frogs, had to return to the water to lay their eggs. What finally brought about complete independence from the water was the development of the amniotic egg, which packaged the watery environment required by the embryo inside a membrane or shell (i.e., an amnion). So the liquid environment that a human embryo requires is provided inside an amnion inside the mother's womb. A human embryo, unlike that of a fish, is independent of the environment external to its mother, indifferent to changes of temperature—indifferent, even, to whether the environment is wet or dry.

The first human beings to emerge from the earth's atmospheric envelope, in the 1960's, were able to do so because they packaged that atmosphere in their amniotic spacesuits and spaceships. Thus, human beings are now able to visit the moon in spite of a lunar environment that would kill them on contact. What these astronauts represent is not adaptation to the natural environment but independence of it.

32. The author's primary purpose in the passage is to
- (A) reveal the miracle of human reproduction
 - (B) offer a wider interpretation of evolution
 - (C) explain the larger meaning of the word "amnion"
 - (D) illustrate the difference between a frog embryo and a human embryo
 - (E) compare the space age with the emergence of life from the water

33. From the tone and content of the passage it can be inferred that the author is addressing which of the following audiences?
- (A) Highly specialized scientists
 - (B) Marine biologists
 - (C) Educated nonprofessionals
 - (D) Aspiring astronauts
 - (E) Environmental conservationists
34. The author uses the development of the amniotic egg to illustrate which of the following?
- (A) The freeing of the reproductive process from its earlier dependence on the external environment
 - (B) The continual dependence of life on a liquid, external environment, despite the emergence of creatures on land
 - (C) The adaptation of organic life to the external environment
 - (D) The independence of the first organisms to emerge on land
 - (E) The adaptive nature of the evolutionary process
35. We can infer from the passage that the author sees spacesuits and spaceships as examples of
- (A) atmospheric adaptation
 - (B) artificial progress
 - (C) futuristic apparel
 - (D) a technological variation of evolutionary progress
 - (E) an innovative packaging in modern technology

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Among economists, John Maynard Keynes ranks with Adam Smith and Karl Marx in the influence that his views have exerted on the general public. He had the vision to see that economics lacked a general theory of demand, and he proceeded with boldness and brilliance to construct one.

His theory produced the startling conclusion that highly developed industrial countries suffer from a chronic deficiency of demand and that this deficiency is bound to grow worse as countries become richer. Hence, Keynes called on government to assume a new responsibility and a new function: to close the growing gap between the power of progressive economies to produce and the size of effective private demand. Keynes suggested two general lines of action—that of controlling the size of the gap through changes in the distribution of income and that of offsetting the gap through greater government spending.

Keynes's theory contributed invaluable tools of analysis to economics and started hundreds of able economists in many lands studying the important problems that the theory opened up. No one in the history of economics has done as much as Keynes to stimulate good work. But Keynes's theory has turned out to be wrong in all its essentials. Although intended to be a "general" theory, applicable to all conditions, it was unduly molded by the depressed Thirties, the period during which Keynes composed it. Since then, economists have determined that advanced economies do not suffer from a chronic deficiency of demand—they suffer from a chronic excess of demand. It would be hard today to find an advanced economy that is not struggling to control demand, and most of them are having only partial success.

It is among the undeveloped economies, precisely where Keynes did not expect to find a chronic shortage of demand, that unemployment is endemic and most severe. Keynes's theory that unemployment is caused by an excessive disposition to save obviously does not explain the high unemployment in countries that are too poor to have any savings at all. The high unemployment in undeveloped countries is best explained by Marx's theory of unemployment—that people lack work because savings are insufficient to provide the growing labor force with the tools of production.

Why has Keynes turned out to have been so completely wrong? He made two basic mistakes. In the first place, he assigned to consumers a relatively passive role in determining the demand for goods. In the second place, he overlooked the fact that the development of investment opportunities is itself an expanding industry, able to supply the community with a rapidly growing number of investment outlets.

36. The author is primarily concerned with which of the following?
 - (A) Rebutting Keynes's theory of demand
 - (B) Presenting a theoretical approach to the problem of unemployment
 - (C) Extending the range of influence of Keynesian theory
 - (D) Contrasting Keynesian economics with Marxist theories
 - (E) Establishing the economic responsibilities of modern governments
37. It can be inferred that the author attributes the unsoundness of Keynes's theory chiefly to the fact that it
 - (A) lacks conclusive proof and is untried
 - (B) rejects a positive course of action
 - (C) considers as universal some rules that pertain to a specific economic era
 - (D) allows too many exceptions to its basic concepts
 - (E) does not concur with theories of contemporary economists
38. Which of the following does the author particularly emphasize as a Keynesian contribution to the field of economics?
 - (A) Formulation of a new attitude toward government
 - (B) Analysis of the theory of unemployment
 - (C) Development of a theory of income distribution
 - (D) Stimulation of the thought and work of other economists
 - (E) Expansion of the theories of Smith and Marx
39. The author notes that one of the causes of unemployment that Keynes overlooked is
 - (A) excessive private demand
 - (B) insufficient savings
 - (C) governmental intervention
 - (D) lack of initiative
 - (E) mechanization
40. As used in line 39, the word "endemic" can best be interpreted to mean
 - (A) contagious and increasing
 - (B) exclusive and persistent
 - (C) unlikely to be found
 - (D) difficult to explain
 - (E) native to the locality

S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.
DO NOT WORK ON ANY OTHER SECTION IN THE TEST.

SECTION 5

Time—30 minutes

35 QUESTIONS

In this section solve each problem, using any available space on the page for scratchwork. Then decide which is the best of the choices given and blacken the corresponding space on the answer sheet.

The following information is for your reference in solving some of the problems.

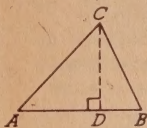
Circle of radius r : Area = πr^2 ; Circumference = $2\pi r$

The number of degrees of arc in a circle is 360.

The measure in degrees of a straight angle is 180.

Definitions of symbols:

$=$	is equal to	$\leq$	is less than or equal to
$\neq$	is unequal to	$\geq$	is greater than or equal to
$<$	is less than	$\parallel$	is parallel to
$>$	is greater than	$\perp$	is perpendicular to



Triangle: The sum of the measures in degrees of the angles of a triangle is 180.

If $\angle CDA$ is a right angle, then

$$(1) \text{ area of } \triangle ABC = \frac{AB \times CD}{2}$$

$$(2) AC^2 = AD^2 + DC^2$$

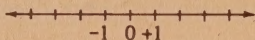
Note: Figures which accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated. All numbers used are real numbers.

1. If $2x + 4 = 9$, then $x - \frac{1}{2} =$

- (A) 2 (B) 3 (C) 6 (D) 12 (E) 14

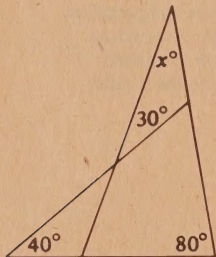
2. $(8\sqrt{4})(2\sqrt{9}) =$

- (A) 48 (B) 72 (C) 96 (D) 298 (E) 576



3. On the number line above, a particle starts at 0 and moves a distance of 2 to the right, then from there moves 4 to the left, then 6 to the right, and so on, alternating directions and lengthening each move by 2. At the end of the fifth move, where on the number line will the particle be located?

- (A) -8 (B) -4 (C) +1 (D) +6 (E) +10



4. In the figure above, $x =$

- (A) 120 (B) 90 (C) 60 (D) 45 (E) 30

5. If x and y are positive integers and if $\frac{x}{y} = 1$ and $(x + y)^2 = z$, which of the following CANNOT equal z ?

- (A) 4
(B) 9
(C) 16
(D) 36
(E) 64

6. If a \$27,000 prize was divided among three people in the ratio of 2:3:5, what was the value of the largest share?

- (A) \$18,900
(B) \$13,500
(C) \$8,100
(D) \$5,400
(E) \$2,700

7. If y is some number between 4 and 10, which of the following could be the average of the numbers 2, 5, 6, 8, 9, and y ?

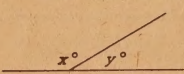
- (A) 4.3
(B) 6.2
(C) 7.8
(D) 9.1
(E) 10.0

GO ON TO THE NEXT PAGE

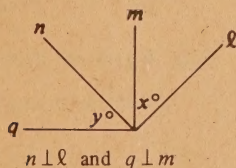
Questions 8-27 each consist of two quantities, one in Column A and one in Column B. You are to compare the two quantities and on the answer sheet blacken space

- A if the quantity in Column A is greater;
 B if the quantity in Column B is greater;
 C if the two quantities are equal;
 D if the relationship cannot be determined from the information given.

- Notes: 1. In certain questions, information concerning one or both of the quantities to be compared is centered above the two columns.
 2. In a given question, a symbol that appears in both columns represents the same thing in Column A as it does in Column B.
 3. Letters such as x , n , and k stand for real numbers.

EXAMPLES		
Column A	Column B	Answers
E1. 2×6	$2 + 6$	☐ A ☐ B ☐ C ☐ D
		
E2. $180 - x$	y	☐ A ☐ B ☐ C ☐ D
E3. $p - q$	$q - p$	☐ A ☐ B ☐ C ☐ D

Column A	Column B
8. $6 + 4^2$	20
$x + 5 = 19$ $y + 5 = 14$	
9. x	y
$a = b = c = d = e$	
10. $a + 2b$	$c + d + e$



11. x	y
---------	-----

Column A	Column B
12. -0.013	-0.087
$x \neq 0$	
13. $3x^2$	$(3x)^2$
$p > q > r > 0$	
14. $p^2 + q^2$	$pq + qr$

TELEPHONE RATES

From P to	First 3 Minutes	Each Additional Minute
Q	45¢	10¢
S	15¢	5¢

15. The cost of a 20-minute call from P to S	\$1.00
$xyz > 0$ $x < 0$	
16. y	z
$16\% \text{ of } 2x = 96.$	
17. $16\% \text{ of } x$	48

GO ON TO THE NEXT PAGE

SUMMARY DIRECTIONS FOR COMPARISON QUESTIONS

Answer: A if the quantity in Column A is greater;
 B if the quantity in Column B is greater;
 C if the two quantities are equal;
 D if the relationship cannot be determined from the information given.

Column A

Column B

$$-7 < n < -3$$

18. 8 n^2

19. Volume of a cylinder with radius 2 Volume of a cylinder with radius 4

$$\begin{aligned} x + y &= 8 \\ x - y &= 12 \end{aligned}$$

20. y 0

A car travels d kilometers in t minutes at a constant rate of 60 kilometers per hour.

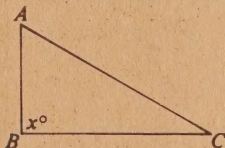
21. t d

LIST I: 1, 2, 3

LIST II: 2, 3, 4

x is a number chosen at random from List I and
 y is a number chosen at random from List II.

22. The most likely value of $x + y$ 5



Note: Figure not drawn to scale.

$$x \neq 90$$

23. $AB^2 + BC^2$ AC^2

Column A

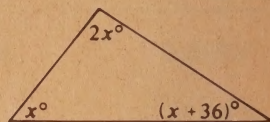
Column B

x is an integer greater than 1. $\boxed{x}$ denotes the smallest positive integer factor of x not equal to 1.

24. $\boxed{x}$ $\boxed{x^2}$

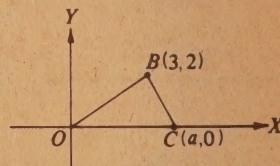
n is a positive integer.

25. $(-1)^n$ $[1 + (-1)]^n$



Note: Figure not drawn to scale.

26. $2x$ $x + 36$



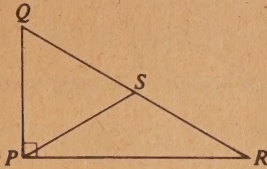
Note: Figure not drawn to scale.

$\triangle OBC$ has an area of 12.

27. a 8

GO ON TO THE NEXT PAGE

Solve each of the remaining problems in this section using any available space for scratchwork. Then decide which is the best of the choices given and blacken the corresponding space on the answer sheet.



28. In the figure above, if $\triangle PQS$ is equilateral, what is the ratio $\frac{PS}{SR}$?

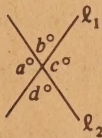
(A) $\frac{1}{2}$ (B) $\frac{1}{\sqrt{3}}$ (C) $\frac{\sqrt{3}}{2}$ (D) 1 (E) 2

29. The difference between $6\frac{2}{3}$ hours and $7\frac{3}{5}$ hours is how many minutes?

(A) 40 (B) 45 (C) 50 (D) 56 (E) 64

30. For $a \neq 0$, $\frac{a^{x+y}}{a^x} =$

(A) a^y (B) $\frac{1}{a^y}$ (C) $-a^y$
(D) a^{1+y} (E) $1 + a^y$



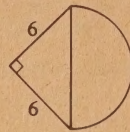
31. In the figure above, which of the following must be equal to 1?

I. $\frac{a+b}{c+d}$
II. $\frac{ab}{cd}$
III. $\frac{c+d-a}{b}$

(A) None (B) I only (C) II only
(D) I and II only (E) I, II, and III

32. The possible scores on a weekly math quiz range from 0 to 100. If Pat receives scores of 65 and 75 on the first two quizzes, what is the lowest possible score Pat can receive on the third in order to average 75 on the first 4 quizzes?

(A) 50
(B) 55
(C) 60
(D) 65
(E) 70

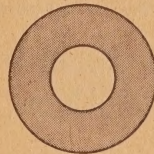


33. In the figure above, the area of the semicircle is

(A) 36π (B) 18π (C) 12π (D) 9π (E) $\frac{9}{2}\pi$

34. There are fewer than 40 students enrolled in a certain class. If, at a certain time, $\frac{2}{9}$ of the students are absent from school and $\frac{1}{4}$ of those in school have gone to the library, what is the total class enrollment?

(A) 18
(B) 27
(C) 28
(D) 32
(E) 36



35. In the figure above, what is the greatest number of nonoverlapping regions into which the shaded region can be divided with exactly two straight lines?

(A) 6 (B) 5 (C) 4 (D) 3 (E) 2

S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.
DO NOT WORK ON ANY OTHER SECTION IN THE TEST.

SECTION 6

Time—30 minutes

50 QUESTIONS

This section tests your ability to use standard written English, the kind of English found in most college textbooks.

Directions: The following sentences contain problems in grammar, usage, diction (choice of words), and idiom.

Some sentences are correct.

No sentence contains more than one error.

You will find that the error, if there is one, is underlined and lettered. Assume that all other elements of the sentence are correct and cannot be changed. In choosing answers, follow the requirements of standard written English.

If there is an error, select the one underlined part that must be changed to make the sentence correct, and blacken the corresponding space on your answer sheet.

If there is no error, blacken answer space (E).

EXAMPLE:

He spoke bluntly and angrily to we
A B C
spectators. No error
D E

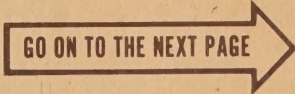
SAMPLE ANSWER

(A) (B) (C) (D) (E)

1. Most people listen to the weather forecast every day,
but they know hardly nothing about the forces
A B C
that influence the weather. No error
D E
2. Him and the other delegates immediately accepted
A B C
the resolution drafted by the neutral states.
D
No error
E
3. The foundations of psychoanalysis were established
A
by Sigmund Freud, who begun to develop his
B C
theories in the 1880's. No error
D E
4. - Charter flights, although much less expensive than
A B
scheduled travel, is well known for late takeoffs
C
and other inconveniences. No error
D E
5. Many women reenter the job market when their
A B
youngest children started kindergarten. No error
C D E
6. After facing so many groups of angry people,
A
Martin Luther King, Jr. became accustomed to
B
confrontations that were unpredictable and even
C D
potentially explosive. No error
E

GO ON TO THE NEXT PAGE

7. During the early Middle Ages, before the develop-
A
 ment of the printing press, virtually the only books
B
 were those that are laboriously copied by monks.
C D
No error
E
8. The decision that has just been agreed with by the
A B
 committee members should serve as a basis for their
C
 work in the years to come. No error
D E
9. In her novels, Nella Larson focused on the problems
A
 of young black women which lived in Europe and
B C
 America during the 1920's. No error
D E
10. As general supervisor, Ms. Rodríguez expects her
A
 staff to work as carefully and as hard the way she
B C D
 herself does. No error
E
11. People who dislike cats sometimes criticize them
A
for being aloof and independent; people who are
B
fond of cats often admire them for the same
C D
 qualities. No error
E
12. Only a few feet beyond those abandoned
A B
and crumbling buildings stand a beautiful
C D
 cluster of weeping willow trees. No error
E
13. In contrasting to the popular view, the
A
 characteristic way of life of many Native
B
 American peoples was neither nomadic nor
C D
 warlike. No error
E
14. Until recently, Americans drank five cups of
A B
 coffee for every cup of tea, but now they are
C
 drinking more of it. No error
D E
15. All our neighbors are wondering what the govern-
A
 ment will do about the raising gasoline prices and the
B C
shortage of oil. No error
D E
16. There are certain areas of the southern United States
A B
where snow has never fallen. No error
C D E
17. When Pelé was playing soccer, he was as talented as,
A B
 or more talented than, baseball or basketball.
C D
No error
E
18. The needs of children often are not taken
A B
into account in the design of public buildings
C
nor residential areas. No error
D E


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19. In a recent ^A created wildlife refuge, the birds
are now building ^B their ^C nests, thereby
greatly changing ^D the ecology of the area.
No error
^E
20. Because ^A flashes of light distract them, entertainers
often request that people with a camera ^C refrain from ^D
taking pictures during performances. No error
^E
21. Color blindness may handicap one ^A in some
respects, but you can ^B still function normally ^C
in almost ^D all situations you encounter. No error
^E
22. Rising ^A at a rate of ten inches per hour, the Red River
soon posed ^B a serious threat to the residents ^C of the
valley. No error ^D
^E

23. Astronomy and astrology are both concerned in
the heavenly bodies, but their purposes and
methods are quite different. No error
D E
24. As the discussion between the two candidates
continued, they spoke more and more loudly
and with less and less dignity. No error
B C D E
25. The doctor lived in the tropics for three years
before he was inflicted by malaria. No error
A B C D E

GO ON TO THE NEXT PAGE

The following sentences test correctness and effectiveness of expression.

Directions: In each of the following sentences, some part or all of the sentence is underlined. Under each sentence you will find five ways of phrasing the underlined part. Select the answer that produces the most effective sentence, one that is clear and exact, without awkwardness or ambiguity, and blacken the corresponding space on your answer sheet. In choosing answers, follow the requirements of standard written English, but do not make a choice that changes the meaning of the original sentence.

Answer (A) is always the same as the underlined part. Choose answer (A) if you think the original sentence needs no revision.

EXAMPLE:

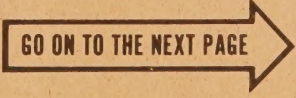
Ms. Rose planning to teach a course in biology next summer.

- (A) planning
- (B) are planning
- (C) have planned
- (D) with a plan
- (E) plans

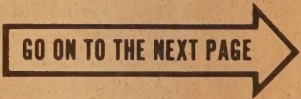
SAMPLE ANSWER

(A) (B) (C) (D) ☒

26. Because dodo birds could not fly, so they were killed by the hogs and monkeys brought to the islands by the explorers.
- (A) fly, so they were killed
 - (B) fly, they were killed
 - (C) fly and they were killed
 - (D) fly, and this allowed them to be killed
 - (E) fly, killing them
27. Performing before an audience for the first time, fear suddenly overcame the child and she could not remember her lines.
- (A) fear suddenly overcame the child and she could not remember her lines
 - (B) the lines could not be remembered by the child because she was overcome by fear
 - (C) the child was suddenly overcome by fear and could not remember her lines
 - (D) the child was suddenly overcome by fear, she could not remember her lines
 - (E) suddenly the child was overcome by fear, and consequently not remembering her lines
28. Young people are not rejecting marriage, but some postponing it.
- (A) some postponing it
 - (B) some are postponing it
 - (C) it is postponed by some of them
 - (D) it is being postponed
 - (E) some having postponed it
29. Violin makers know that the better the wood is seasoned, the better the results for the tone of the instrument.
- (A) better the results for the tone of the instrument
 - (B) better the tone of the instrument
 - (C) better the result is for the instrument's tone
 - (D) resulting tone will be better
 - (E) result will be a better instrument tone
30. Although today many fabrics are made from synthetic fibers, at one time all natural fibers were used in their manufacture.
- (A) all natural fibers were used in their manufacture
 - (B) all fabrics were made of natural fibers
 - (C) they were making them all of natural fibers
 - (D) they made fabrics all of natural fibers
 - (E) their manufacture was of all natural fibers
31. Between three and four per cent of all children born with hearing defects serious enough to require medical treatment.
- (A) born with hearing defects
 - (B) being born with hearing defects that are
 - (C) are born with hearing defects
 - (D) are born with hearing defects, these are
 - (E) born with hearing defects which are

GO ON TO THE NEXT PAGE 

32. Issued in Great Britain in 1840, the first gummed postage stamp in history was known as the "Penny Black."
- (A) the first gummed postage stamp in history was known as
 - (B) they called the first gummed postage stamp in history
 - (C) history refers to the first gummed postage stamp as
 - (D) was the first gummed postage stamp in history.
 - (E) the first gummed postage stamp in history being known as
33. A number of parents are concerned about the protection of high school athletes and the many injuries being reported.
- (A) athletes and the many injuries being reported
 - (B) athletes and numerous reports of injuries
 - (C) athletes because of reports of numerous injuries
 - (D) athletes, but many injuries are being reported
 - (E) athletes, numerous injuries have been reported
34. Many inferior films earn a great deal of money for their producers, some extremely good ones do not.
- (A) Many inferior films earn
 - (B) Many an inferior film earns
 - (C) With many inferior films which earn
 - (D) However, many inferior films earn
 - (E) Although many inferior films earn
35. Gas rationing would force consumers to use their cars less, use public transportation more, while conserving gasoline.
- (A) while conserving
 - (B) as well as conserving
 - (C) conserving
 - (D) and thereby conserve
 - (E) to conserve
36. Dolphins have a basic social organization, a system of communication, and their brains are highly developed.
- (A) and their brains are highly developed
 - (B) and highly developed brains
 - (C) with highly developed brains
 - (D) while their brains are developed highly
 - (E) but their brains are developed highly
37. The Romans built many magnificent aqueducts and roads, they were truly the great engineers of the ancient world.
- (A) roads, they were truly the great
 - (B) roads, consequently they were truly the great
 - (C) roads and as a consequence, they were truly the greatest
 - (D) roads; truly the great
 - (E) roads; they were truly the great
38. The Japanese began their remarkable postwar recovery, but they were able to recover from the psychological effects of the war.
- (A) recovery, but they were
 - (B) recovery, where they were
 - (C) recovery only when they were
 - (D) recovery only when being
 - (E) recovery because it was
39. For success in sports, it is important not only to be in good physical condition but also to know the rules of the game.
- (A) to be in good physical condition but also to know
 - (B) being in good physical condition but also to know
 - (C) to be in good physical condition but also knowing
 - (D) being in good physical condition but also knowing
 - (E) that one be in good physical condition but also that you know
40. Founded in 1910, the Urban League was established and has continuously had for its purpose the aim of assisting blacks who live in large cities.
- (A) was established and has continuously had for its purpose the aim of
 - (B) was established to aim in the purpose of
 - (C) has continuously had for its purpose the aim of
 - (D) has always aimed at
 - (E) was with the purpose of

GO ON TO THE NEXT PAGE 

Note: The remaining questions are like those at the beginning of the section.

Directions: In each sentence, select the one underlined part that must be changed to make the sentence correct, and blacken the corresponding space on your answer sheet.

If there is no error, blacken answer space (E).

EXAMPLE:

He spoke bluntly and angrily to we
 A B C
 spectators. No error
 D E

SAMPLE ANSWER

(A) (B) (C) (D) (E)

41. Idealists are not always as ignorant of realities as his
 A B C
 critics would like to believe. No error
 D E
42. Once an Italian colony, Eritrea was captured by
 A B
 the British in 1941 and was united with Ethiopia
 C
 in the early 1950's. No error
 D E
43. More women are competing in athletics as new
 A B C
 opportunities for training develop and as sports
 programs will expand. No error
 D E
44. Mayor Jameson was eager to demonstrate that she
 A B
 was not prejudiced in favor of any particular political
 groups and residents of specific areas of the city.
 C D
No error
 E
45. In any lively debate, there is at least two sides to
 A B C
 an issue and five arguments for every point of
 D
 view presented. No error
 E
46. After she had spoke for fifteen minutes, the
 A
 senator answered candidly the questions asked by
 B
 the reporters, whose skepticism was obvious.
 C D
No error
 E
47. Demonstrating new products is a more expensive
 A
but more effective sales technique than
 B
merely talking about them. No error
 C D E
48. Moscow's city officials plan doubling the size of
 A
 the city's subway system, which already includes
 B
more than one hundred miles of track. No error
 C D E
49. The speaker argued that neither industry nor
 A
 government have taken full responsibility
 B
for reducing the spiral of inflation. No error
 C D E
50. The average taxpayer waits until April to file a
 A
 tax return unless they expect to receive a refund
 B C
of considerable size. No error
 D E

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.
 DO NOT WORK ON ANY OTHER SECTION IN THE TEST.

HOW TO SCORE YOUR SAMPLE TEST

SAT scores are reported on the College Board scale of 200 to 800. A score of 200 isn't necessarily equal to zero, nor does a score of 800 mean that you answered every question correctly. The TSWE score is reported on a scale of 20 to 60+. The TSWE is not intended to distinguish among students whose command of English is better than average. Therefore, students who receive a score of 60+ can conclude that the test is not difficult enough to measure the upper limits of their ability.

There are two steps in scoring:

1. determining verbal, mathematical, and TSWE raw scores (counting the number of right responses and subtracting a fraction of the number wrong), and
2. finding the College Board scaled scores for the corresponding raw scores.

You will understand the scoring process better if you try to apply it to the sample test you just took.

Determining Your Raw Score

For the SAT-verbal sections and the TSWE

The 85 questions in sections 1 and 3 yield the verbal score. Check your answers against the table on page 45. Scan the verbal questions (sections 1 and 3) and count the number of right answers and the number of wrong answers. Count one point for each correct response. For each wrong response, subtract one-fourth of a point. There is no need to count the questions you omitted because they do not affect your scores.

Raw score = number right minus one-fourth of the number wrong

For example, if you have 46 right responses to the verbal questions in sections 1 and 3 and 31 wrong responses, then your verbal raw score is 46 minus one-fourth of 31, which equals 38. Or $46 - \frac{1}{4}(31) = 38\frac{1}{4}$, which rounds down to 38 (the nearest integer).

You can find your TSWE score in the same way. For example, if you have 39 right responses to the TSWE questions in section 6 and 10 wrong responses, then your TSWE raw score is 39 minus one-fourth of 10, which equals 37. Or $39 - \frac{1}{4}(10) = 36\frac{1}{2}$, which rounds up to 37.

For the SAT-mathematical sections

Determining the mathematical score is a little more complicated because some of the questions contain only four possible answer choices instead of the usual five. Count the 20 four-choice questions (numbers 8 through 27 in section 5) as a separate score. Count the 40 five-choice mathematical questions (all of section 2 and numbers 1 through 7 and 28 through 35 in section 5) as a second mathematical score. Obtain the raw scores as follows:

Raw score for 20 four-choice questions = number right minus one-third of the number wrong

Raw score for 40 five-choice questions = number right minus one-fourth of the number wrong

Add the results of the two scores to obtain one total mathematical raw score. For example, suppose you have 10 right and 10 wrong for the 20 four-choice questions; then, the raw score is 10 minus one-third of 10, which equals $6\frac{2}{3}$. Or $10 - \frac{1}{3}(10) = 6\frac{2}{3}$. And suppose you have 24 right and 11 wrong for the 40 five-choice questions; then the raw score is 24 minus one-fourth of 11, which equals $21\frac{1}{4}$. Or $24 - \frac{1}{4}(11) = 21\frac{1}{4}$.

To obtain the total raw score, add $6\frac{2}{3}$ to $21\frac{1}{4}$ for a mathematical score of 28. (Round any scores with fractions to whole numbers only after the two parts are summed.)

Finding Your College Board Score Range

Use the table on page 46 to find the range of College Board scores for the SAT-verbal, SAT-mathematical, and TSWE raw scores you obtained on the sample test. For example, in the column headed "Raw Score," find your verbal raw score or the score nearest to it. In the column headed "SAT-verbal," find the range of College Board scores for it. Let's say your verbal raw score is 38. The number closest to it is 40. The column headed "SAT-verbal" shows that the range of College Board scores for a raw score of 40 is 460-480. The range for your score of 38 would be somewhat lower.

The table shows a range of scores because there are slight variations in the difficulty of different versions of the test. On an easier version of the test, the raw score obtained would result in the College Board score that is at the lower end of the range. For a more difficult version, the raw score would result in the College Board score that is at the higher end of the range.

Let's take another example. Suppose your mathematical raw score is 27. The number closest to it in the column headed "Raw Score" is 25. The column headed "SAT-mathematical" shows that the range of College Board scores for a raw score of 25 is 470-490. The range for your score of 27 would be somewhat higher.

ANSWERS TO SAMPLE TEST QUESTIONS AND PERCENTAGE OF STUDENTS ANSWERING EACH QUESTION CORRECTLY

Section 1—Verbal			Section 2—Mathematical			Section 3—Verbal			Section 5—Mathematical			Section 6—TSWE		
Question number	Correct answer	Percentage of students answering the question correctly	Question number	Correct answer	Percentage of students answering the question correctly	Question number	Correct answer	Percentage of students answering the question correctly	Question number	Correct answer	Percentage of students answering the question correctly	Question number	Correct answer	Percentage of students answering the question correctly
1	C	95%	1	B	80%	1	E	96%	1	A	78%	1	B	90%
2	B	90	2	B	92	2	A	85	2	C	79	2	A	94
3	D	80	3	E	84	3	B	87	3*	D		3	B	90
4	E	80	4	C	69	4	C	69	4	E	71	4	C	78
5	A	71	5	C	76	5	D	35	5	B	67	5	D	86
6	B	75	6	D	76	6	A	22	6	B	65	6	E	88
7	C	66	7	E	68	7	B	19	7	B	59	7	D	74
8	B	68	8	C	80	8	A	18	8	A	92	8	B	64
9	D	55	9	B	63	9	A	20	9	A	95	9	B	80
10	E	32	10	B	44	10	E	15	10	C	80	10	D	74
11	A	24	11	B	55	11	C	84	11	C	70	11	E	88
12	A	16	12	C	52	12	E	66	12	A	80	12	D	64
13	C	13	13	A	60	13	D	54	13	B	78	13	A	52
14	A	18	14	C	56	14	D	26	14	A	65	14	D	72
15	B	10	15	C	39	15	A	16	15	C	62	15	C	70
16	C	92	16	A	49	16	B	91	16	D	83	16	E	76
17	A	73	17	E	33	17	D	81	17	C	48	17	D	66
18	D	46	18	D	38	18	D	76	18	B	65	18	D	65
19	B	51	19	B	16	19	B	84	19	D	38	19	A	52
20	A	42	20	A	21	20	C	71	20	B	44	20	C	43
21	E	50	21	D	20	21	D	71	21	C	40	21	A	50
22	A	41	22	B	34	22	E	26	22	C	29	22	E	63
23	D	57	23	A	9	23	D	23	23	D	31	23	B	57
24	B	67	24	D	10	24	A	24	24	C	8	24	E	47
25	C	35	25	D	11	25	B	11	25	D	19	25	D	44
26	C	53				26	D	79	26	C	24	26	B	92
27	E	53				27	E	85	27	A	14	27	C	68
28	D	55				28	B	81	28	D	51	28	B	88
29	C	41				29**	B	67	29	D	52	29	B	50
30	A	56				30	E	73	30	A	39	30	B	60
31	D	76				31	C	35	31	E	30	31	C	74
32	C	50				32	B	68	32	C	24	32	A	67
33	A	31				33	C	72	33	D	11	33	C	59
34	E	27				34	A	28	34	E	10	34	E	70
35	C	13				35	D	53	35	B	7	35	D	56
36	E	81				36	A	49				36	B	66
37	B	71				37	C	41				37	E	53
38	B	62				38	D	34				38	C	60
39	D	64				39	B	47				39	A	62
40	A	47				40	E	8				40	D	29
41	E	23										41	C	67
42	C	24										42	E	72
43	B	18										43	D	75
44	D	24										44*	C	
45	B	15										45	B	48
												46	A	68
												47	E	61
												48	A	55
												49	B	42
												50	C	44

Notes: The percentages are based on the analysis of the answer sheets for a random sample of students who took this test in April 1981 and whose mean scores were 430 on the SAT-verbal sections, 470 on the SAT-mathematical sections, and 43 on the TSWE.

The order of the six SAT sections varies from one edition to another. Note that Section 4, the experimental section in the edition reprinted in this booklet, is omitted (see page 19).

*Question 3 in Section 5 and question 44 in Section 6 in the edition of the SAT administered on April 4, 1981, were not counted in computing scores. In the sample test in this booklet, these two questions are printed as they appear in a later edition of the SAT.

**In question 29(C), "whoever" was printed as "whomever" in the original version of the test.

When you take the SAT, your score is likely to differ from the score you obtained on the sample test. People perform at different levels at different times for reasons unrelated to the test itself. In addition, the precision of any test is limited because it represents only a sample of all the possible questions that could be asked.

RAW SCORES CONVERTED TO SCALED SCORES

Raw Score*	SAT-verbal (85 questions)	College Board Score Ranges SAT-mathematical (60 questions)	TSWE (50 questions)
85	800		
80	750-770		
75	710-730		
70	670-690		
65	630-650		
60	590-620	800	
55	560-580	740-760	
50	530-550	690-720	60 +
45	490-510	640-670	57-60 +
40	460-480	600-630	52-55
35	420-440	560-580	47-50
30	390-410	510-530	42-45
25	350-370	470-490	37-39
20	320-340	430-450	31-34
15	280-310	380-400	26-29
10	250-270	340-360	21-24
5	210-240	290-320	20
0	200-210	250-280	20

* Raw score = number right minus a fraction of the number wrong

Note: The ranges for the College Board scores are based on all editions of the SAT given from November 1977 through June 1980. Scores for the sample test in this booklet fall within these ranges.

In addition to correct answers to the sample test, the table on page 45 gives percentages, which are based on the analysis of the answer sheets for a random sample of students who took this test in April 1981 and whose mean scores were 430 on the SAT-verbal sections, 470 on the SAT-mathematical sections, and 43 on the TSWE. The percentages will give you an idea of how hard each question was for students with about average verbal or mathematical ability.

For example, the percentage for question 6 in verbal section 1 indicates that 75 percent of a group of students scoring 430 would probably answer this item correctly. The question, therefore, is not very hard for them. Question 10 would be much harder for such a group. Only 32 percent got question 10 right.

After you have scored your test, analyze your performance.

- For instance, did you omit questions because you ran out of time before you reached the end of a section? Reread pages 3 through 18. The suggestions in them may help you pace yourself better.
- Did you take so long reading directions that you didn't have enough time to answer questions? If you become thoroughly familiar with the test directions reprinted in this booklet, you won't have to spend much time reading them during the test.
- Look at the specific questions you missed. Did you get caught by a choice that was only partly correct? Figure out what step you overlooked in your reasoning.

RECEIVING YOUR SCORE REPORT

About six weeks after you take the SAT and TSWE, you will receive a report that includes your scores and percentile ranks. The percentile ranks show how your scores compare with the scores of certain other groups of students who have taken the SAT and TSWE. With the report, you'll receive a booklet, *Your Score Report*, which will help you interpret and understand the scores, percentile ranks, and other information that appear on your report. The booklet will also explain how colleges use your scores. Your counselor will have additional interpretive material.

SAT QUESTION-AND-ANSWER SERVICE

If you take the SAT on one of the dates for which this service is available, you may order the service anytime up to five months after the test date. You will receive a copy of your test questions and answer sheet, a list of the correct answers, and scoring instructions. See the *Student Bulletin* for additional information and an order form.

We hope that *Taking the SAT* has provided information that will increase your confidence when you take the test. Your suggestions and comments concerning the contents of the booklet will be welcome. Send them to College Board ATP, Box 592, Princeton, NJ 08541.

Side 1

Use a No. 2 pencil only for completing this answer sheet. Be sure each mark is dark and completely fills the intended space. Completely erase any errors or stray marks.

IMPORTANT: Please fill in these boxes exactly as shown on the back cover of your test book.

3. FORM CODE

4. REGISTRATION NUMBER
(Copy from your Admission Ticket)

0	A	7	5	0	0	0
1	B	6	4	1	1	1
2	C	5	3	2	2	2
3	D	4	2	3	3	3
4	E	3	1	4	4	4
5	F	2	0	5	5	5
6	G	1		6	6	6
7	H	0	2	7	7	7
8	I	A		8	8	8
9				9	9	9

7. SEX

☐ Male

☐ Female

8. T

0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9

BOOK SERIAL NUMBER

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SECTION 2											
1	☐	☐	☐	☐	☐	26	☐	☐	☐	☐	☐
2	☐	☐	☐	☐	☐	27	☐	☐	☐	☐	☐
3	☐	☐	☐	☐	☐	28	☐	☐	☐	☐	☐
4	☐	☐	☐	☐	☐	29	☐	☐	☐	☐	☐
5	☐	☐	☐	☐	☐	30	☐	☐	☐	☐	☐
6	☐	☐	☐	☐	☐	31	☐	☐	☐	☐	☐
7	☐	☐	☐	☐	☐	32	☐	☐	☐	☐	☐
8	☐	☐	☐	☐	☐	33	☐	☐	☐	☐	☐
9	☐	☐	☐	☐	☐	34	☐	☐	☐	☐	☐
10	☐	☐	☐	☐	☐	35	☐	☐	☐	☐	☐
11	☐	☐	☐	☐	☐	36	☐	☐	☐	☐	☐
12	☐	☐	☐	☐	☐	37	☐	☐	☐	☐	☐
13	☐	☐	☐	☐	☐	38	☐	☐	☐	☐	☐
14	☐	☐	☐	☐	☐	39	☐	☐	☐	☐	☐
15	☐	☐	☐	☐	☐	40	☐	☐	☐	☐	☐
16	☐	☐	☐	☐	☐	41	☐	☐	☐	☐	☐
17	☐	☐	☐	☐	☐	42	☐	☐	☐	☐	☐
18	☐	☐	☐	☐	☐	43	☐	☐	☐	☐	☐
19	☐	☐	☐	☐	☐	44	☐	☐	☐	☐	☐
20	☐	☐	☐	☐	☐	45	☐	☐	☐	☐	☐
21	☐	☐	☐	☐	☐	46	☐	☐	☐	☐	☐
22	☐	☐	☐	☐	☐	47	☐	☐	☐	☐	☐
23	☐	☐	☐	☐	☐	48	☐	☐	☐	☐	☐
24	☐	☐	☐	☐	☐	49	☐	☐	☐	☐	☐
25	☐	☐	☐	☐	☐	50	☐	☐	☐	☐	☐

[illegible]

Side 2

Use a No. 2 pencil only for completing this answer sheet. Be sure each mark is dark and completely fills the intended space. Completely erase any errors or stray marks.

Start with number 1 for each new section of the test. You may find more answer spaces than you need. If so, please leave them blank.

[illegible]

9. SIGNATURE:

FOR ETS USE ONLY	VTR	VTFS	VVR	VVFS	VVR	VVFS	WER	WEFS	MAR	M4FS	MSR	MSFS	MTFS	
	VTW	VTCS	VVRW	VVCS	VVW	VVCS	WEW	WECS	M4W		MSW		MTCS	

Note: This is a reduced sample of both sides of an actual SAT answer sheet. Do not use Section 4 of this sample answer sheet because that section is omitted from the sample test.

SIX POINTS ABOUT SPECIAL PREPARATION FOR THE SAT

A Message to Students

The question is frequently asked: What can I do about raising my SAT scores or about making them better than they would be otherwise? The answer is: Quickly and immediately probably not much; over longer periods it depends upon how much time, effort, and concentration goes into the preparation.

The Scholastic Aptitude Test measures the extent to which your reasoning ability and skills with words and mathematical concepts have been developed up to the time you take the test. These are abilities that are related to academic success in college and that grow over a lifetime through learning experiences such as those in the family, in school, with your friends and associates, and in reading and independent study. The best preparation for the SAT is to have had varied opportunities of this kind and to have made the most of them.

The skills and abilities the SAT tests tend to grow relatively slowly and at different rates for different people. Whether you have more or less of these abilities does not say anything about your worth as an individual. Many other individual qualities not measured by the SAT, such as motivation, creativity, and artistic skills, have much to do with your sense of satisfaction and your success in life.

If you or your parents have been thinking about special preparation for the SAT outside your regular classroom activities, these six points are worth remembering:

1. The SAT measures developed verbal and mathematical reasoning abilities that are involved in successful academic work in college; it is not a test of some inborn and unchanging capacity.
2. Scores on the SAT are subject to improvement as educational experience, both in and out of school, causes these verbal and mathematical abilities to develop.
3. Development of these abilities is related to the time and effort spent; short-term drill and cramming are likely to have little effect; longer-term preparation that develops skills and abilities can have greater effect.
4. While drill and practice on sample test questions generally result in little effect on test scores, preparation of this kind can familiarize you with different question types and may help to reduce anxiety about what to expect. You can help yourself to become familiar with the test by using the explanations and full sample test in this booklet.
5. Whether longer preparation, apart from that available to you within your regular high school courses, is worth the time, effort, and money is a decision you and your parents must make for yourselves; results seem to vary considerably from program to program, and for each person within any one program. Studies of special preparation programs carried on in many high schools show various results averaging about 10 points for the verbal section and 15 points for the mathematical over and above the average increases that would otherwise be expected from intellectual growth and practice. In other programs results have ranged from virtually no improvement in scores to average gains as high as 25-30 points for particular groups of students or particular programs. Recent studies of commercial coaching have shown a similar range of results. You should satisfy yourself that the results of a special program or course are likely to make a difference in relation to your college admissions plans.
6. Generally, the soundest preparation for the SAT is to study widely with emphasis on academic courses and extensive outside reading. SAT score increases of 20-30 points correspond to about three additional questions answered correctly. Such a result might be obtained by independent study in addition to regular academic course work.



1983-84

Massachusetts Financial Aid Form for Residents of the Commonwealth of Massachusetts

Information and Instructions for:

- **1983-84 Massachusetts State Scholarship Programs**
- **Federal Pell Grant Program**
- **Institutional Financial Assistance Programs**

Residents of Massachusetts Who Wish to Apply for Student Financial Assistance for 1983-84 Should:

- **READ THIS BOOKLET CAREFULLY.**
- **COMPLETE THE MASSACHUSETTS FINANCIAL AID FORM (MFAF).**
- **MAIL THE MFAF TO ARRIVE AT THE COLLEGE SCHOLARSHIP SERVICE BY MARCH 1, 1983, TO INSURE STATE SCHOLARSHIP CONSIDERATION.**
- **ADDRESS ANY QUESTIONS ABOUT MASSACHUSETTS STATE SCHOLARSHIPS TO: BOARD OF REGENTS OF HIGHER EDUCATION—SCHOLARSHIP OFFICE • 330 STUART ST., BOSTON, MA 02116**

The Massachusetts Financial Aid Form (MFAF) is the Financial Aid Form to be used by Massachusetts residents to apply for 1983-84 Massachusetts state scholarship programs based on financial need. The same form can also be used to apply for:

- The Federal Pell Grant Program.
- Need-based financial aid from institutions that you might attend.

Some colleges, however, may require that you file additional forms directly to them. Contact the college's financial aid office to determine which forms you are required to complete. Unless your college requires additional forms, the MFAF is the only form that is needed to apply for state, federal, and institutional aid.

In the MFAF packet, you will find:

- Massachusetts Information and Instruction Leaflet.
- Information on the Pell Grant Program.
- Massachusetts Financial Aid Form (Sides I and II).
- Instructions for completing the Financial Aid Form (FAF).
- Mailing envelope.
- College Scholarship Service (CSS) code list of institutional code numbers.

Please read this leaflet carefully. It contains information and application procedures for all Massachusetts state scholarship programs administered by the Massachusetts Board of Regents of Higher Education (MBOR). There are two types of state scholarship programs: those that are based on financial need and those that are not. The programs based on financial need require that the student complete the MFAF. (See Section A.) The three programs that are not based on financial need and do not require the MFAF are very limited in their individual and institutional eligibility. (See Section B.) All the funds distributed through MBOR scholarship programs are grants or gifts of money that do not have to be repaid by the student.

EXPLANATION OF TERMS USED FOR THE MASSACHUSETTS STATE SCHOLARSHIP PROGRAMS

New Applicants

New applicants are those students who did **not** receive payment in 1982-83 of the scholarship for which they are applying for 1983-84.

Renewal Applicants

Renewal applicants are those students who received payment of a state scholarship in 1982-83 and who are applying for the same type of scholarship for 1983-84. Those who received payment for 1981-82, but not for 1982-83, are not renewal applicants for 1983-84.

Dependent Students

In accordance with national guidelines, dependent students are those

applicants to whom at least one of the following situations applies: they lived with their parents for more than 6 weeks in 1982 or in 1983; they were claimed by their parents as income tax exemptions for 1982 or for 1983; or they received more than \$750 worth of support from their parents in 1982 or in 1983.

Independent Students

In accordance with national guidelines, independent students are those who answer "No" to all 6 questions in FAF items 11, 12, and 13.

They lived with their parents for less than 6 weeks in both 1982 and 1983, were not claimed by their parents as an income tax exemption in either 1982 or 1983, and received \$750 or less in support from their parents in 1982 and in 1983. In addition, for Massachusetts state scholarship purposes, married students are considered to be independent, although they might not meet all of the above conditions.

Massachusetts Legal Resident

To be eligible for undergraduate scholarships, a student must be a permanent legal resident of Massachusetts for at least 12 months before the beginning of the academic year for which state scholarship aid is received. To qualify as a legal resident, one must have a permanent address in Massachusetts. **Dependent students are considered to have the same state of legal residence as their parents.** Attendance at a Massachusetts institution does not constitute Massachusetts residence. For graduate (medical and dental) scholarships, the student must be a permanent legal resident of Massachusetts for four years before the year during which state scholarship aid is received.

SECTION A. NEED-BASED MASSACHUSETTS STATE SCHOLARSHIP PROGRAMS

You must complete the MFAF to apply for either need-based state scholarship program. Although the FAF Side II is not required for either state aid or the Pell Grant, you are urged to complete it and submit it with your MFAF, because most Massachusetts colleges require its use. Information on the FAF Side II may be necessary to clarify your status. A missing Side II, therefore, could cause a delay in the processing of your application.

I. General Scholarship Program

This is the largest state scholarship program, with an annual appropriation of approximately \$17 million. Last year, the 1982-83 academic year, approximately 25,000 students out of 100,000 applicants received awards. These awards are available to undergraduate students for four years but are not automatically renewable. A student must reapply for the General Scholarship each year.

(continued on next page)

Requirements

- Financial need, as determined from the MFAF with nationally accepted need analysis procedures
- Enrollment full time in an eligible postsecondary program at an eligible institution (See "Institutions Where Award May Be Used" below.)
- U.S. citizens must be permanent legal residents of Massachusetts since September 1, 1982. Non-U.S. citizens must hold Immigration Form I-151 and must be permanent legal residents of Massachusetts since September 1, 1982. (See MFAF Item 5.)
- The student has not earned a baccalaureate degree.
- The student has received no more than three previous years of General Scholarships.
- The student is maintaining satisfactory progress in accordance with the standards of the institution.

Institutions Where Award May Be Used

All Applicants

There are four categories of eligible institutions and/or programs:

1. Massachusetts institutions approved for undergraduate degree authority by the Commonwealth
2. Programs at Massachusetts public and nonprofit postsecondary institutions which charge tuition and
 - provide at least one year of training to prepare students for gainful employment in a recognized occupation, and
 - are eligible for the federal Pell Grant Program
3. Programs at Massachusetts proprietary postsecondary institutions which
 - are at least two years long, and
 - are eligible for the federal Pell Grant Program
4. Non-Massachusetts degree-granting colleges which
 - are regionally accredited, and
 - are located in states whose residents may use their state scholarships at Massachusetts institutions. These states currently are Connecticut, Maine, Maryland, New Hampshire, Pennsylvania, Rhode Island, Vermont, and the District of Columbia. This list is subject to change.

Certain Renewal Applicants

In addition to the four categories listed above, those students who received at least one semester award payment in each of the academic years 1979-80, 1980-81, 1981-82, and 1982-83, but not more than a total of seven semester payments of Massachusetts State General Scholarships, may use such awards again in 1983-84 at regionally accredited institutions in all states and at those institutions listed in Section C.

Award Values

Award values for 1983-84 vary upward of \$300 depending on the cost of attendance at the student's institution and the state's appropriation for this program.

Application Procedures

Enter at least one eligible institution in MFAF Item 41. *Do not* list the Massachusetts State Scholarship Program. Send the completed MFAF to CSS, Princeton, NJ, by the application deadline with the processing fee. To be considered for a Massachusetts State General Scholarship you must check the Massachusetts State Scholarship Program box in MFAF Item 42. Add \$2.50 to the appropriate processing fee as indicated in MFAF Item 42. **All students applying to the General Scholarship Program are also required to apply to the Pell Grant Program.** Release of your MFAF to the Pell Grant Program must be authorized by checking "Yes" in question 43. We will not process your MFAF unless release is authorized to Pell Grants at the same time as to us.

Application Deadline

The MFAF must **not** be filed before January 1, 1983, but must be filed with CSS between

- January 1 and March 1, 1983 by all applicants.

Those who apply after this date may not receive consideration due to lack of funds.

Notification Procedures

If your MFAF is received by CSS by the filing deadline and is complete at that time, you should receive notification of your status by July 1983. If you are offered a General Scholarship award and are a new applicant, you will then be requested to provide a copy of the 1982 federal income tax return to our office. Dependent students will be asked to submit a copy of their parents' 1982 income tax return. Independent students will be asked to submit a copy of their own 1982 income tax return. Awards are not final until verified by tax data. Payment of the award is made directly to the institution.

II. Medical and Dental Scholarship Program

This program, the only state program available for students attending graduate school, provides aid to Massachusetts residents enrolled in M.D., D.M.D., and D.D.S. programs at approved medical and dental schools. The award is available for up to five years, but is not automatically renewed. The student must reapply for the Medical or Dental Scholarship each year.

Requirements

- Financial need as determined from the MFAF using nationally accepted need analysis procedures
- Enrollment full time toward an M.D., D.M.D., or D.D.S. degree at a professionally approved graduate school of medicine or dentistry. (See Section D for the approved list.)
- U.S. citizens must be permanent legal residents of Massachusetts since September 1, 1979. Non-U.S. citizens must hold Immigration Form I-151, and must be permanent legal residents of Massachusetts since September 1, 1979. (See MFAF Item 5.)
- The student has received no more than four years of previous medical and dental awards.

Institutions Where Award May Be Used

These awards may be used at professionally approved graduate schools of medicine and dentistry. (See Section D.)

Award Values

Award values for 1983-84 will range from \$600 to \$900 depending on the student's financial need, the cost of attendance at the student's institution, and the state's appropriation for this program.

Application Procedures

Enter at least one eligible institution in MFAF Item 41. Do not list the Massachusetts State Scholarship Program. Send the completed MFAF to CSS, Princeton, NJ, by the application deadline with the processing fee. You must check the Massachusetts State Scholarship Program box in MFAF Item 42. Add \$2.50 to the appropriate processing fee as indicated in MFAF Item 42. Check "Yes" in MFAF Items 43 and 44a. Also, check MFAF Item 45b or c, as appropriate, to be considered for a Massachusetts State Medical or Dental Scholarship.

Application Deadline

The MFAF must **not** be filed before January 1, 1983, and must reach CSS not later than March 1, 1983. Those who apply after this date may not receive consideration due to lack of funds.

Notification Procedures

Notification procedures for the Medical and Dental Scholarship Program are the same as for the General Scholarship. Please see the notification procedures in the General Scholarship section above.

SECTION B. NON-NEED BASED STATE SCHOLARSHIP PROGRAMS

Students applying to these programs do not need to file the MFAF unless they wish consideration for the General Scholarship in addition to the non-need based program for which they desire consideration. Please read the directions below carefully. Each program has its own application procedures.

I. Honor Scholarship Program

This program is open to entering freshmen only. Honor scholarships are awarded to the four students in each Massachusetts senatorial district with the highest Scholastic Aptitude Test (SAT) scores. These awards may be used only at one of the 14 Massachusetts public four-year institutions. (See list in Section E.)

Requirements

- One of the four top SAT scores in student's home senatorial district
- Enrollment full time at a Massachusetts public four-year institution (See Section E.)
- Permanent legal resident of Massachusetts since September 1, 1982
- Only entering freshmen eligible to apply for new awards

Award Values

The award value for 1983-84 will be for the cost of tuition for up to four years of undergraduate study at a Massachusetts public four-year institution.

Application Procedures and Deadlines

- Student must take the SAT between November 1981 and January 22, 1983.
- Student must request that the College Board release the SAT scores to the Massachusetts Board of Regents of Higher Education.

Section D—Income and Expense Information (continued)**28.** 1982 medical and dental expenses not paid by insurance**29.** 1982 elementary, junior high, and high school tuition paid (Don't include tuition paid for the student.)**30.** Expected 1983 taxable and nontaxable income and benefits (See instructions.)

If you are filling in the tan shaded areas, answer 31a, 31b, and 32 about the student (and spouse).

31. a. Student's (and spouse's) 1982 income from IRS Form 1040—line 32, 1040A—line 12, 1040EZ—line 3, or see instructions**b.** Student's (and spouse's) 1982 nontaxable income and benefits (See instructions.)**32.** Student's (and spouse's) savings and net assets (See instructions.)**Parents****28.** \$.00**29.** \$.00**30.** \$.00**31a.** \$.00**31b.** \$.00**32.** \$.00**Student (and spouse)****28.** \$.00**29.** \$.00

If you are filling in only the gray shaded areas, skip to Section E. Don't answer 30, 31, and 32.

Section E—Asset Information**Parents****What is it worth now?****What is owed on it?****33.** Cash, savings, and checking accounts**33.** \$.00

XXXXXXXXXXXX

34. Home (Renters write in "0.")**34.** \$.00

\$.00

35. Other real estate and investments**35.** \$.00

\$.00

36. Business and farm**36.** \$.00

\$.00

Student (and spouse)**What is it worth now?****What is owed on it?****33.** \$ 10 .00

XXXXXXXXXXXX

34. \$ 6 .00

\$ 6 .00

35. \$ 0 .00

\$ 0 .00

36. \$ 0 .00

\$ 0 .00

ALL STUDENTS MUST FILL IN SECTIONS F AND G.

Section F—Student's (and Spouse's) Expected Income and Benefits**Summer 1983****School Year 1983-84****37. a.** Student's taxable income (Don't include student financial aid.)

3 months \$.00

9 months \$.00

b. Spouse's taxable income (Don't include student financial aid.)

3 months \$.00

9 months \$.00

July 1, 1983-June 30, 1984**38.** Social security educational benefits (for student only)

Amount per month \$.00

Number of months

39. Veterans educational benefits (Include only the student's benefits from the GI Bill and Dependents Educational Assistance Program. Don't include VA Contributory Benefits.)

Amount per month \$.00

Number of months

40. Other nontaxable income and benefits of student (and spouse) (Don't include any of the income or benefits given in 37, 38, and 39 or student financial aid.)

Amount for July 1, 1983-June 30, 1984 \$.00

Section G—Other Information and Signatures**41.** List the names and code numbers of the colleges and programs that are to get information from this FAF. Don't list state scholarship agencies or federal student aid programs. Be sure to enclose the right fee.

Name	City and state	CSS Code No.	Housing Code *
Boothman Inst. of Forestry	Boothman MD		1
Univ. of Southern Maine	Portland ME		1

* Housing Codes (Enter only one code for each college):

1 = Campus residence hall

5 = Off-campus residence hall

2 = Campus married student housing

6 = Off-campus apartment/house

3 = Parents' home

7 = Other type of housing

4 = Relatives' home

42. Fee: Check the box next to the number of colleges and programs listed in 41.1 ☐ \$6.503 ☐ \$15.505 ☐ \$24.502 ☐ \$11.004 ☐ \$20.006 ☐ \$29.00**Massachusetts State Scholarship Program:** If you want information from this FAF sent to this agency, list at least one college in 41, check here, and add \$2.50 to the amount checked above.**Massachusetts State Scholarship Program** ☐ \$2.50

For example: If two colleges are listed (\$11.00) and you checked the agency box at 42 (\$2.50), enclose \$13.50. Mail this FAF with a check or money order made out to the College Scholarship Service.

43. Do you give CSS permission to send information from this FAF to the U.S. Department of Education? (Answer "Yes" if you want to be considered for the Pell Grant, Supplemental Educational Opportunity Grant, College Work-Study, National Direct Student Loan, or Guaranteed Student Loan programs.) Yes ☐ 1 No ☐ 2**44.** Do you give the U.S. Department of Education permission to send information from this FAF to:**a.** the financial aid agency in your state?Yes ☒ 1 No ☐ 2**b.** the first college in 41?Yes ☒ 1 No ☐ 2

Note: Answering "Yes" to 44a and 44b will not meet the requirements of most states and colleges for applying for financial aid. See instructions.

45. Massachusetts Residents: Complete for State Programs**09**

Don't list the Massachusetts State Scholarship Program (MSSP) in 41. Your FAF information will automatically be sent to MSSP if:

- You list at least one college or program at 41.
- You check the MSSP box in 42 and pay the right fee.

Massachusetts residents must complete 45a and 45b or 45c below, if appropriate. Undergraduate students must check "Yes" in 43 and 44a and include the correct fee. Medical or dental students should check "Yes" in 43 and 44a. After May 1, 1983, undergraduate students should not check the Massachusetts State Scholarship Program box in 42, should not enclose a processing fee, and should not complete 45, as it will be too late to apply for 1983-84 awards.

All students answer a.**a.** Enter the month and year your legal residence in Massachusetts began.

Month Year

Only graduate students answer b or c.**b.** Will you be enrolled in 1983-84 in a program leading to an M.D. degree? If so, check here.☐**c.** Will you be enrolled in 1983-84 in a program leading to a D.D.S. or D.M.D. degree? If so, check here.☐**Certification:** All of the information on this form is true and complete to the best of my knowledge. If asked by an authorized official, I agree to give proof of the information that I have given on this form. I realize that this proof may include a copy of my 1982 U.S. state, or local income tax return. I also realize that if I don't give proof when asked, the student may not get aid.

1 Student's signature

2 Spouse's signature

Date completed:

3 Father's signature

4 Mother's signature

Month Day Year

CONTINUE WITH QUESTION 46 ON THE NEXT PAGE.

School Year 1983-84

Name of high school _____

Student's expected date of completion of college degree or certificate

06	88
Month	Year

1 ☒ Academic year, 1983-84 4 ☐ Winter term, 1983-84
2 ☐ Summer term, 1983 5 ☐ Spring term, 1984
3 ☐ Fall term, 1983 6 ☒ Summer term, 1984

53. Other income and benefits (nontaxable)			
a. Social security benefits	\$	.00	\$.00
b. Aid to Families with Dependent Children (AFDC or ADC)	\$	.00	\$.00
c. All other nontaxable income and benefits (Explain in 69.)	\$	.00	\$.00
Total income (52a-f minus g and h plus 53a-c)	\$	.00	\$.00

If your total incomes for 1982 and 1983 differ by \$2,000 or more, explain in 69.

a. Name Anthony David Ragano
b. Street address _____
c. City/State/Zip Lake Charles LA.
d. Occupation/Title _____
e. Employer _____ f. Number of years _____
g. Covered by this employer's pension plan? Yes ☐ 1 No ☐ 2
h. Social security number

a. Name Marjorie F. Bayona
b. Street address 223 Highland ave.
c. City/State/Zip Smerville MA. 02143
d. Occupation/Title Minister / Pastor
e. Employer Metropolitan Community Church Number of years 4
g. Covered by this employer's pension plan? Yes ☐ 1 No ☒ 2
h. Social security number

a. year purchased 19 b. purchase price \$.00

What is it worth now? What is owed on it?

a. investments	\$	.00	\$	.00
b. other real estate	\$	.00	\$	.00

59. Give information for all children and other dependents who are included in parents' household in 17. Include parent if he or she will attend college in 1983-84. For persons not in school, give name and age only. If you need extra space, continue in 69.

[illegible]

60. Divorced or separated parents
(To be completed by the parent who has filed this form)

a. Student's natural or adoptive parents are:

☒ Divorced
☐ Legally separated
☐ Separated—no court action

Date of divorce or separation _____

_____ Month _____ Year

b. Other parent's name A. David Rasmussen

Home address _____

Occupation/Title _____

Employer _____

c. According to court order, when will support for student end?

	1982	Estimated 1983
d. Amount of child support received for the student	\$.00	\$.00

e. Total amount of child support received for all children	\$	.00	\$	.00
--	----	-----	----	-----

f. Amount of alimony received by parent who filed this form		\$	.00	\$	.00
---	--	----	-----	----	-----

g. Is there any agreement specifying a contribution for student's education?

Yes ☐ No ☐
If yes, how much per year? \$.00 \$.00

h. Who claimed student as a tax dependent for 1982?

i. If there are special circumstances, check here ☐ and explain in 69.

Section J—Student's Information (continued)

61. Student's (and spouse's) resources (Don't enter monthly amounts.)

	Summer 1983 (3 months)	Academic Year 1983-84 (9 months)
a. Student's wages, salaries, tips, etc. (before taxes and deductions. Don't include work-study earnings.)	\$.00	\$.00
b. Spouse's wages, salaries, tips, etc. (before taxes and deductions. Don't include work-study earnings.)	\$.00	\$.00
c. Other taxable income (interest, dividends, etc.)	\$.00	\$.00
d. Social security benefits	\$.00	\$.00
e. Veterans Administration Contributory Benefits	\$.00	\$.00
f. Other veterans benefits	\$.00	\$.00
g. Aid to Families with Dependent Children (AFDC or ADC)	\$.00	\$.00
h. Support from student's parents (See instructions.)	\$.00	\$.00
i. Support from spouse's parents	\$.00	\$.00
j. Grants, scholarships, fellowships, loans, and other aid already awarded (Explain in 69.)	\$.00	\$.00
k. Other nontaxable income	\$.00	\$.00
Total resources (Add a-k.)	\$.00	\$.00

62. Student's

a. Occupation Receptionist

b. Employer Huron Animal Clinic

c. Will you continue to work for this employer during the 1983-84 school year? Yes ☐ No ☐

63. Spouse's

a. Name _____ b. Age _____

c. Occupation _____

d. Employer _____

e. College in 1983-84 _____

64. Give information for all children and other dependents.

Name	Age

65. Monthly home mortgage or rental payment \$.00 (If none, explain in 69.)

66. If you own a home, give

a. year purchased 1981 b. purchase price \$.00

67. If you included investments or other real estate in 35, list

	What is it worth now?	What is owed on it?
a. investments	\$.00	\$.00
b. other real estate	\$.00	\$.00

68. List all colleges attended since high school up to and including the present. If you need more space, continue in 69.

Name of college	City and state	Period of attendance (mo./yr. to mo./yr.)	Check if you received financial aid.	CSS Code Number

Section K—Explanations and Special Circumstances

69. Use this space to list types and amounts of income or expense for questions 52f, 52h, 53c, and 61j. Also explain any unusual expenses, educational and other debts, or special circumstances.

Financial Aid Form—Side I

School Year 1983-84

Read the instructions carefully as you fill in this form.

Massachusetts 09

Section A—Student's Information

1. Student's name

LAST RAGONIA FIRST ELIZABET M.I. L

2. Student's permanent mailing address (See front cover for state abbreviation.)

Number, street, and apartment number 273 HIGHLAND AVE APT 2 City SOMERVILLE State MA Zip code 02143

3. Student's social security number

556-61-1564

4. Student's date of birth

Month 02 Day 28 Year 65

5. Student's state of legal residence

MA State

6. The student is

- 1 ☒ a U.S. citizen
2 ☐ an eligible noncitizen (See instructions.)
3 ☐ neither of the above (See instructions.)

7. Student's year in college during 1983-84. (Check only one box.)

- 1 ☒ 1st (freshman) 5 ☐ 5th (undergraduate)
2 ☐ 2nd (sophomore) 6 ☐ beginning graduate or professional (beyond a bachelor's degree)
3 ☐ 3rd (junior) 7 ☐ continuing graduate or professional
4 ☐ 4th (senior)

8. Will the student have a bachelor's degree by July 1, 1983?

Yes ☐ 1 No ☒ 2

9. The student is 1 ☒ unmarried (single, divorced, or widowed)
2 ☐ married 3 ☐ separated

10. How many dependent children does the student have? (If none, write in "0") 0

Warning

If you use this form to establish eligibility for federal student aid funds, you should know that any person who makes false statements or misrepresentations on this form is subject to a \$10,000 fine or to imprisonment or both, under provisions of the United States Criminal Code.

Section B—Student's Status Read the instructions to find out who counts as the student's parent before you answer 11, 12, and 13.

11. Did or will the student live with the parents for more than six weeks (42 days)

12. Did or will the parents claim the student as a U.S. income tax exemption

13. Did or will the student get more than \$750 worth of support from the parents

Yes No
.. in 1982? 1 ☒ 2 ☐ .. in 1983? 1 ☒ 2 ☐
.. in 1982? 1 ☒ 2 ☐ .. in 1983? 1 ☒ 2 ☐
.. in 1982? 1 ☐ 2 ☐ .. in 1983? 1 ☐ 2 ☐

If you answered "Yes" to any of the questions in Section B, you must fill in the tan shaded areas.

● Exception: If you are married, fill in both the tan and the gray shaded areas.

● If your parents are separated or divorced, if your parent is widowed or single, or if you have a stepparent, you must read the instructions before going on.

If you answered "No" to all 6 questions in Section B, you must fill in the gray shaded areas. Some colleges or programs may also ask you to fill in the tan shaded areas.

Section C—Household Information

Parents

14. The parents' current marital status is:

- 1 ☐ single 3 ☐ separated 5 ☐ widowed
2 ☐ married 4 ☒ divorced

15. The parents' state of legal residence is

MA

16. The age of the older parent is

54

17. The total size of the parents' household during 1983-84 will be (Include the student even if he/she does not live at home. Also include parents and parents' other dependent children. Include other people only if they meet the definition in the instructions.) 03

18. Of the number in 17, how many will be in college during 1983-84? (Include the student who is applying for aid and others who will be in college at least half-time.) 1

Student (and spouse)

19. The total size of the student's household during 1983-84 will be (Include the student, spouse, and student's dependent children. Include other people only if they meet the definition in the instructions.)

20. Of the number in 19, how many will be in college during 1983-84? (Include the student who is applying for aid and others who will be in college at least half-time.) 1

Section D—Income and Expense Information

- If you will file or have filed a 1982 U.S. income tax return, go to 21.
● If you will not file a 1982 U.S. income tax return, skip to 26.

21. The following 1982 U.S. income tax return figures are (See instructions.)

22. 1982 total number of exemptions (IRS Form 1040—line 6e, 1040A—line 5e, or 1040EZ—write in "01.")

23. 1982 income from IRS Form 1040—line 32, 1040A—line 12, or 1040EZ—line 3 (Use the worksheet in the instructions.)

24. a. 1982 U.S. income tax paid (IRS Form 1040—line 50, 1040A—line 19a, or 1040EZ—line 9)

b. 1982 state and local income taxes paid

25. 1982 itemized deductions (IRS Form 1040, Schedule A—line 28. Write in "0" if deductions were not itemized.)

26. 1982 income earned from work

27. Other 1982 income and benefits (nontaxable)

a. Social security benefits (Don't include the student's benefits.)

b. Aid to Families with Dependent Children (AFDC or ADC)

c. All other 1982 nontaxable income and benefits (child support, disability income, etc.) (Use the worksheet in the instructions.)

Parents

21. 1 ☐ from a completed return
2 ☐ estimated

22. ☐

23. \$.00

24a. \$.00

24b. \$.00

25. \$.00

26a. Father \$.00

26b. Mother \$.00

27a. \$.00

27b. \$.00

27c. \$.00

Student (and spouse)

21. 1 ☐ from a completed return
2 ☐ estimated

22. ☐

23. \$.00

24a. \$.00

24b. \$.00

25. \$.00

26a. Student \$.00

26b. Spouse \$.00

27a. XXXXXXXXXXXXX

27b. \$.00

27c. \$.00

Tax Filers Only

financial Aid form

Massachusetts

School Year 1983-84

COLLEGE SCHOLARSHIP SERVICE OF THE COLLEGE BOARD

Important—Read carefully before completing this form.

You may use this form to apply for financial aid under federal, state, institutional, and private financial aid programs. If you are applying **only** for federal student financial aid under the Pell Grant, Guaranteed Student Loan, Supplemental Educational Opportunity Grant, College Work-Study, and National Direct Student Loan Programs, you may use the free "Application for Federal Student Aid." It is available from your high school counselor or college financial aid office. However, some state agencies and postsecondary institutions may require additional information which they need for awarding nonfederal aid and which is not included on the free Application for Federal Student Aid. If you wish to apply for other aid, as well as federal aid, you should check with your high school counselor, college financial aid office, or state scholarship agency as to which form to file. If you use this form in applying for financial aid, you are considered to be applying for financial aid under state, institutional, and private programs. During 1982-83, about 75 percent of all applicants for student assistance filed this form or a similar one, while 25 percent filed the free federal application.

What is the Financial Aid Form?

The Financial Aid Form (FAF) is a form that you fill out if you want to apply for financial aid for the school year 1983-84 from:

- financial aid programs at colleges where you are thinking of going after high school or where you now go
- state scholarship and grant programs
- federal student financial aid programs, including the Pell Grant Program

The information you give on the FAF is confidential.

After you complete the FAF, send it to the College Scholarship Service (CSS). The CSS will analyze it and send the information to the colleges and programs that you list on your FAF. Each college or program then decides whether you will get financial aid and how much aid you will get.

How do I apply for financial aid from colleges and from state scholarship and grant programs?

Check with the colleges you want to attend to see if they need a copy of the FAF. If so, list them in question 41. It costs \$6.50 for the first college and \$4.50 for each other college you list in question 41.

If you want to apply to your state scholarship or grant program, check the special box in question 42 and add \$2.50 to the fee.

Don't send cash. Make your check or money order out to the College Scholarship Service. The correct amount must be sent with the FAF. Some colleges and programs may require you to fill out other forms as well.

How do I apply for federal student financial aid programs?

You apply for federal student financial aid programs by checking "Yes" in question 43. You'll find more information about federal student financial aid programs in this booklet.

When should I fill out the FAF?

Fill out, sign, and mail the FAF after **January 1, 1983**, but at least one month before the earliest deadline of the colleges and programs that you list in question 41. Don't mail this FAF to CSS after March 15, 1984.

What is my CSS "Estimated Contribution"?

The CSS estimates what you and your family can pay toward your costs for college. Remember that each college or program makes the final decision about how much you and your family can pay. Because of this, the amount that the college or program figures can be higher or lower than the CSS Estimated Contribution.

The CSS will send you a report showing the information that was used to calculate your estimated contribution. If you need to correct any of the information that you send to CSS, please wait until you receive this report before making your corrections.

Note: Some colleges and programs may ask you to send a copy of your income tax return to them. If so, send it directly to the college or program. If you don't give the income tax information that is asked for, you may not receive aid. **Don't send any income tax forms with your FAF to the CSS.**

Where do I send the FAF?

After you fill out the FAF, put it in the envelope that you'll find inside this booklet and mail it to the correct address given below.

If you live in:

Alabama AL New Hampshire NH
Connecticut CT New Jersey NJ
Delaware DE New York NY
District of Columbia DC North Carolina NC
Florida FL Ohio OH
Georgia GA Pennsylvania PA
Indiana IN Puerto Rico PR
Kentucky KY Rhode Island RI
Louisiana LA South Carolina SC
Maine ME Tennessee TN
Maryland MD Vermont VT
Massachusetts MA Virgin Is. VI
Michigan MI Virginia VA
Mississippi MS West Virginia WV
Missouri MO Wisconsin WI

If you live in:

Alaska AK Nevada NV
Amer. Samoa AS New Mexico NM
Arizona AZ North Dakota ND
Arkansas AR Northern Mariana Is. CM
California CA Oklahoma OK
Colorado CO Oregon OR
Guam GU South Dakota SD
Hawaii HI Texas TX
Idaho ID Trust Territory of the Pacific Is. TT
Illinois IL Utah UT
Iowa IA Marshall and Caroline Is. TT
Kansas KS Montana MT Washington WA
Kentucky KY Nebraska NE Wyoming WY

send your filled-out FAF to:

College Scholarship Service
Box 2857
Princeton, NJ 08541

send your filled-out FAF to:

College Scholarship Service
Box 380
Berkeley, CA 94701

If you live somewhere other than the places listed above, send your filled-out FAF to the CSS office in Princeton, NJ.

Will the CSS tell me when it has finished analyzing my FAF?

Yes. The CSS will send you an Acknowledgment after it has analyzed your FAF. The Acknowledgment (including your "Estimated Contribution") will be sent to the student's mailing address given in question 2 of the FAF. You should get your Acknowledgment about one month after you send your FAF to the CSS. If you don't hear from the CSS within one month after you have filed the FAF, you can call one of the following toll-free numbers for information: 800-772-3537 if calling from within the continental U.S. OR 800-558-5885 if calling from Alaska or Hawaii. If all lines are busy, you can call 609-734-3900 to reach the Princeton, NJ office or 415-849-0950 to reach the Berkeley, CA office. If you call the 609 or 415 area numbers, there is a toll charge.

Normal business hours are 8:15 A.M.-4:15 P.M. for the Princeton Office (Eastern Time Zone) and the Berkeley Office (Pacific Time Zone). The above numbers can be reached only during these periods.

The Acknowledgment will list the colleges and programs to which your FAF was sent. If you list more than six colleges to get your FAF, the Acknowledgment will list only the first six. A second Acknowledgment will be sent to you separately which will list the additional colleges.

What if I later want to send my FAF to another college or program?

The Acknowledgment form has a section which you can tear off and send to CSS if you later want to send your FAF to another college or program. The section is called the Additional College Request Form (ACR). The fee for the ACR is \$6.50 for the first college or program you list and \$4.50 for each other one.

FEDERAL STUDENT FINANCIAL AID PROGRAMS

You can use this form as the first step in applying for financial aid from five student assistance programs offered by the U.S. Department of Education (ED). More than 6,500 colleges and other institutions take part in one or more of the federal programs. Some colleges, however, do not take part in all of the programs. Contact the college financial aid administrator to find out which federal programs the college participates in.

What are the five federal student aid programs?

Pell Grants. Pell Grants are awarded to students who need money to pay for college. A Pell Grant is not a loan, so you don't have to pay it back. To get a Pell Grant, you must go to college at least half-time and be an undergraduate who doesn't already have a bachelor's degree.

Supplemental Educational Opportunity Grants (SEOG). An SEOG is also a grant. To get an SEOG, you must be an undergraduate who doesn't already have a bachelor's degree. Usually, you must be going to college at least half-time. However, a college can award SEOGs to a limited number of students who are enrolled for less than half-time.

College Work-Study (CWS). A CWS job lets you earn part of your college expenses for either undergraduate or graduate study. Usually, you must be going to college at least half-time. However, a college can award CWS jobs to a limited number of students who are enrolled for less than half-time.

National Direct Student Loans (NDSL). NDSLs are low-interest loans made by a college to both undergraduate and graduate students who are going to college at least half-time. You must repay this money.

Guaranteed Student Loans (GSL). A GSL is a low-interest loan made to you by a lender such as a bank, credit union, or savings and loan association. These loans are for both undergraduate and graduate students who are going to college at least half-time. You must repay this money.

Who can get aid from these programs?

To receive financial aid from these federal programs, you must:

- Be a U.S. citizen or an eligible noncitizen.
- Be registered for the draft with the Selective Service if you are a man who is at least 18 years old and born after December 31, 1959 and who is not a current member of the active armed forces.
- Have financial need. The ED and your college will use the information you put on this form to determine your need.
- Attend a college that takes part in one or more of the programs.
- Be enrolled at least half-time (except for CWS and SEOG).
- Be working toward a degree or certificate (except for GSL).
- Be making satisfactory academic progress (as defined by your college).

How do I get aid from these programs?

Fill out the FAF, check "Yes" to question 43, and send it to the CSS with the correct fee. **Your form must be received by March 15, 1984 but not before January 1, 1983. The sooner you send it in, the better.** The CSS will send your information to the ED.

Within eight to ten weeks after you mail in this form, the ED will send you a *Student Aid Report (SAR)*. On the SAR will be a number called a *Student Aid Index (SAI)*. A formula established by law is used to figure this number. The SAI helps decide whether you can get a Pell Grant and, if so, how much. This SAI will also help the college decide whether you are eligible for aid from the SEOG, NDSL, and CWS programs.

If you don't get a SAR within eight to ten weeks, write to: Federal Student Aid Programs, Box 92832, Los Angeles, CA 90009. Give your name, address, social security number, and date of birth, and ask for a copy of your 1983-84 SAR. If your address has changed since you sent in your FAF, be sure to give your old and new addresses. Be sure to sign your letter.

What if my financial situation changes?

This form asks mostly about income and expenses for 1982. If your fi-

nancial situation has recently changed for the worse, you may be able to fill out a Special Condition Application for Federal Student Aid. That application asks mostly about the income and expenses that you expect to have in 1983. Contact your financial aid administrator to find out more about the Special Condition Application for Federal Student Aid.

Where can I get additional information?

Write to Student Guide, Dept. DEA-84, Pueblo, CO 81009, and ask for a copy of *The Student Guide: Five Federal Financial Aid Programs, 1983-84*.

Information on the Privacy Act and Use of Your Social Security Number

The Privacy Act of 1974 says that each federal agency that asks for your social security number or other information must tell you:

- its legal right to ask for the information and whether the law says you must give it
- what purpose the agency has in asking for it and how it will be used
- what could happen if you do not give it

You must give your social security number to apply for a Pell Grant or a Guaranteed Student Loan. The social security number is needed to know who you are, to process your form, and to keep track of your record. In addition, your social security number is used in the Pell Grant Program in recording information about your college attendance and progress, in making payments to you directly in case your college doesn't handle this, and in making sure that you have received your money. If you don't give your social security number, you will not get a Pell Grant or a Guaranteed Student Loan.

The legal right to require that you provide your social security number for the Pell Grant and Guaranteed Student Loan programs is based on Section 7(a) (2) of the Privacy Act of 1974.

It is requested that you voluntarily give your social security number if you are using this form only to apply for financial aid from the College Work-Study, National Direct Student Loan, and Supplemental Educational Opportunity Grant programs. Your social security number is used in processing your form. If you don't give your social security number, you may still receive aid under these programs.

The legal right to ask for all information except your social security number is based on sections of the law that authorizes the Pell Grant, Supplemental Educational Opportunity Grant, College Work-Study, National Direct Student Loan, and Guaranteed Student Loan programs. These include sections 411, 413B, 443, 464, 425, 428, and 482 of the Higher Education Act of 1965, as amended.

If you are applying for federal student aid under all five programs, you must fill in everything on the form except questions 30, 41, 42, 44, and all of Side II. But, if you are not applying for a Pell Grant or a Supplemental Educational Opportunity Grant, you can also skip question 8. If you are not applying for a Pell Grant or a Guaranteed Student Loan, you can skip questions 31a and 31b as well as questions 30, 41, 42, 44, and all of Side II. If you skip question 44, it will be counted as "No."

The information on the form is asked for so that your "Student Aid Index" and "Expected Family Contribution" can be figured. The Student Aid Index is used to help figure out how much of a Pell Grant you will get, if any. The Student Aid Index or the Expected Family Contribution may also be used to figure out how much other federal financial aid you will get, if any. While you are not required to respond, no Pell Grant may be awarded unless this information is provided and filed as required under 20 U.S.C. 1070a; 34 CFR 690.11.

Your name, address, social security number, date of birth, Student Aid Indexes, student status, year in college, and state of legal residence will be sent to the first college you list in question 41 even if you check "No" in question 44. This information will also go to the state scholarship agency in your state of legal residence to help it coordinate state financial aid programs with federal student aid programs. Also, information may be sent to members of Congress if you or your parents ask them to help with federal student aid questions. The information also may be used for any purpose which is a "routine use" listed in Appendix B of 34 CFR 5b.

INSTRUCTIONS

Read the instructions as you fill out this form. Most mistakes result from not reading the instructions. Mistakes will delay the processing of your form.

The Instructions will usually answer questions that you have. If you need more help, contact a guidance counselor at your high school or the financial aid administrator at the college you plan to attend.

Although other people (besides the student who is applying for aid) may help fill out this form, the form is about the student. When the words "you" and "your" are used, they always mean the student. When the word "college" is used, it means a college, university, graduate or professional school, vocational or technical school, or any other school beyond high school.

Records you will need

Get together these records for yourself and your family.

- 1982 U.S. income tax return (IRS Form 1040, 1040A, or 1040EZ)
- 1982 state and local income tax returns
- W-2 forms and other records of money earned in 1982
- Records of nontaxable income, such as veterans, social security, AFDC or ADC, or welfare benefits
- Current bank statements
- Current mortgage information
- Records of medical and dental bills that were paid in 1982
- Business and farm records
- Records of stocks, bonds, and other investments

Keep these records. Your college may ask to see them to check the information you reported on this form.

Won't file a tax return. If you, your spouse, and/or your parents won't be filing a 1982 U.S. income tax return, you'll need to know how much income, if any, was earned in 1982. You may also need records showing the amount of income you reported on this form.

Tax return not completed yet. If you, your spouse, and/or your parents haven't completed a 1982 U.S. income tax return but will be filing one, it is **strongly recommended that you complete your tax return now, before completing this FAF.** Knowing what will be on your tax return will help you to fill out the FAF accurately. When your FAF is compared with the official 1982 IRS Form 1040, 1040A, or 1040EZ that is filed by you and your family, the financial information must agree. If there are any errors, **you will have to correct the information on your SAR and send it back.** If this happens, it will take longer for the ED to figure your SAI and determine whether you are eligible for a Pell Grant. It could mean a delay in getting financial aid.

Foreign tax return. If you or your parents filed or will file a 1982 income tax return with a central government outside the United States, use the information from that return to fill out this form. Convert all figures to U.S. dollars. If you or your parents also filed or will file an IRS Form 1040, 1040A, or 1040EZ, use information from both the U.S. income tax return and the foreign tax return to fill out this form.

Note: Don't report funds that you or your parents received as an award under the Distribution of Judgement Funds Act or the Alaska Native Claims Settlement Act or the Maine Indians Claims Settlement Act as income or assets. Don't report property as an asset if: (a) it may not be sold or have loans placed against it without consent of the Secretary of Interior, or (b) the property is held in trust for you or your family by the U.S. government.

When you fill out this form:

- Use a pen with black or dark ink; don't use a pencil.
- Print carefully, so that your form will be easy to read.
- Round off figures to the nearest dollar.

Warning: Your college or the U.S. Department of Education can verify the accuracy of the information you give on this form through a process called validation. If you are selected for validation, you and/or your spouse and/or parents will have to provide the 1982 U.S. tax return, the worksheets in this booklet, and other proof that your information is correct. So it is important that you keep this booklet and these financial records. Also, you may want to make a copy of your completed FAF for your records. If your college or the Department of Education asks you for these records and you do not provide them, you will not get all of your money. If you get federal student aid by giving incorrect information, you will have to pay it back. If you purposely give **false or misleading information** on your form, you may get a \$10,000 fine, a prison sentence, or both.

SIDE I

Section A—Student's Information

Print in this Section information about the student who is applying for aid.

1. Write in your last name, first name, and middle initial. Print carefully. For example:

WILLIAMSON, J.
Last

2. Write in the address where you normally will be receiving mail during 1983-84. If you may be moving, be sure to give your permanent mailing address. Don't use the address of the financial aid office or any other office at a school.
3. Write in your social security number. Carefully copy the number from your social security card.

4. Write in the date you were born. Show the month as a two-digit number. For example, because July is the seventh month, you would write "07" in the boxes for "Month." Write in a two-digit number for the day. The fifth day of the month would be "05." Write in the last two numbers of the year. For example, 1965 would be "65." Therefore, if you were born July 5, 1965, write:

07 05 65
Month Day Year

5. Write in the two-letter abbreviation of your state of legal residence. Use the state abbreviations listed on the front cover.
6. If you are a U.S. citizen as of the date you complete this form, check box "1" and go on to question 7. Check box "2" if you are one of the following:

- U.S. national
- U.S. permanent resident and you have an Alien Registration Receipt Card (I-151 or I-551)
- Permanent resident of the Northern Mariana Islands
- Permanent resident of the Trust Territory of the Pacific Islands
- Other eligible noncitizen, and you have one of the following documents from the U.S. Immigration and Naturalization Service:
 - Arrival-Departure Record (I-94) showing: (a) "refugee;" or (b) "adjustment applicant;" or (c) "conditional entrant;" or (d) "indefinite parole."
 - An official statement that you have been granted asylum in the U.S.

If you cannot check box "1" or "2," you **must** check box "3." If you are in the U.S. on only an F1 or F2 student visa or only a J1 or J2 exchange visitor visa, you **must** check box "3."

7. Check your year in college from July 1, 1983 to June 30, 1984. Check only one box. A "graduate or professional" program is usually a program you begin after you graduate from college.
8. Check "No" if you don't have a bachelor's degree and you won't have one by July 1, 1983.
Check "Yes" if you will have a bachelor's degree by July 1, 1983. Also check "Yes" if you will have a degree from a university in another country that is equal to a bachelor's degree.
9. Check the box for your marital status as of the date you complete this form.
10. Write in the number of dependent children that you have. If you have no dependent children, write in "0."

Section B—Student's Status

When the word "parents" is used in Section B of this form, it means your mother and/or father or your adoptive parents. In some cases it may mean a legal guardian who has been appointed by a court. It **doesn't** mean foster parents and, for this Section, it **doesn't** mean stepparents (but later in the instructions, you will be told if information about your stepparent is required).

Before you answer questions 11, 12, and 13, read the descriptions below and check the box next to the one that is true for you.

- ☐ **Your parents are both living and married to each other.** Answer the questions in Section B about them.

- ☐ **Your parents are divorced or separated.** Answer the questions in Section B for the parent you lived with most in the last 12 months. For example, if you lived with your mother most, answer questions 11, 12, and 13 about her and not about your father.

If you didn't live with either parent, or you lived with each parent an equal number of days, answer the questions in Section B for the parent who provided the greater amount of support to you in the last 12 months. (Support includes money, gifts, loans, housing, food, clothes, car, medical and dental care, payment of college costs, etc.)

- ☐ **Your parent is widowed or single.** Answer the questions in Section B about your widowed or single parent.

- ☐ **Your parents are both dead** and you don't have an adoptive parent or a legal guardian. Answer "No" to all questions in Section B, and fill in the gray shaded areas on this form.

- ☐ **You have a legal guardian.** Answer the questions in Section B about your legal guardian. This is only a person whom a court has (a) appointed to be your legal guardian and (b) directed to support you with his or her own financial resources. Check this box only if your legal guardian fits this definition.

- ☐ **You are a ward of the court.** Answer "No" to all questions in Section B, and fill in the gray shaded areas on this form.

Now answer questions 11, 12, and 13 based on which box you checked. Answer all three questions for both 1982 and 1983. If you leave any answer blank, it will be counted as "Yes."

11. If you lived with your parents more than six weeks (a total of 42 days) in 1982 or you will in 1983, you must answer "Yes." You must answer "Yes" even if you pay your parents for room and board.
12. If your parents claimed you on their 1982 U.S. income tax return or if they will claim you for 1983, you must answer "Yes."
13. If your parents gave you more than \$750 worth of support in 1982 or if they will do so in 1983, you must answer "Yes." (Support includes money, gifts, loans, housing, food, clothes, car, medical and dental care, payment of college costs, etc.)

Important instructions for Sections C, D, and E

If you answered "Yes" to any of the questions in Section B for any year, you must fill in all of the tan shaded areas on the form with information about your parents. In Section C, answer questions 14-18. In Sections D and E, give your parents' financial information. (Section D also has two questions about you, the student.) Don't fill in the gray shaded areas. **Exception:** If you are married, fill in both the tan and gray shaded areas.

Divorced, separated, widowed, or single parents. Give information only about the parent that you counted in Section B. If that parent has married or remarried, read the next paragraph.

Stepparent. If the parent that you counted in Section B has married or remarried, you must also include your stepparent's information if either:

- You lived with your stepparent (and parent) for more than six weeks (a total of 42 days) in 1982, or you will in 1983.
- or
- You got or will get more than \$750 in support from your stepparent in 1982 or 1983.

If you are reporting information about your stepparent, note that whenever the word "parents" is used on the rest of this form, it also means your stepparent.

If you answered "No" to all six questions in Section B, you must fill in all of the gray shaded areas on the form with information about you and, if you are married, your spouse (husband or wife). In Section C, answer questions 19 and 20. In Sections D and E, give your (and your spouse's) financial information. Although you must always fill in the gray shaded areas, you may also have to fill in the tan shaded areas if a college or program tells you to.

Section C—Household Information

Parents' information—tan shaded areas

Fill in this Section with information about your parents.

14. Check the box for your parents' marital status as of the date you complete this form.
Show the current marital status of the people that you give information for on this form. For example, if you must give information about your mother and stepfather, check the box that says "married," because your mother and stepfather are married.
15. Write in the two-letter abbreviation for your parents' state of legal residence as of the date you complete this form. See the front cover for a list of state abbreviations.
16. Write in the age of your older parent as of the date you complete this form.
17. Write in the number of people that your parents will support between July 1, 1983 and June 30, 1984. Include your parents, yourself, and your parents' other dependent children. If you (the student) have dependent children, also include them. Include other people only if they now live with and get more than half of their support from your parents and will continue to get this support between July 1, 1983 and June 30, 1984. Don't include your (the student's) spouse.
18. Write in the number of people from question 17, including yourself, who will be going to college or other schools beyond the high school level between July 1, 1983 and June 30, 1984. To be included here, each student must be enrolled at least half-time. Half-time means the student is taking at least 6 credit hours per term. If the college uses clock hours, the student must be attending at least 12 clock hours per week.

Student's (and spouse's) information—gray shaded areas

Fill in this Section with information about yourself (and your

spouse). If you are divorced or separated, don't include information about your spouse.

19. Write in the number of people that you (and your spouse) will support between July 1, 1983 and June 30, 1984. Include yourself, your spouse, and your dependent children. Include other people only if they now live with and get more than half of their support from you (and your spouse) and will continue to get this support between July 1, 1983 and June 30, 1984.
20. Write in the number of people from question 19, including yourself, who will be going to college or other schools beyond the high school level between July 1, 1983 and June 30, 1984. To be included here, each student must be enrolled at least half-time. Half-time means the student is taking at least 6 credit hours per term. If the college uses clock hours, the student must be attending at least 12 clock hours per week.

Section D—Income and Expense Information

If the instructions tell you to skip a question, leave it blank. If your answer to any other question is "none" or "zero," put a zero in the answer space. For example: \$ 0 .00

If your parents filed or will file a 1982 U.S. income tax return, continue with question 21. Fill in the answers in this Section using your parents' 1982 U.S. income tax return (IRS Form 1040, 1040A, or 1040EZ) or other financial records. Make sure you answer all of the questions in the section marked "Tax Filers Only." If you are giving information for only one parent and that parent filed or will file a joint tax return for 1982, give only that parent's portion of the income and expenses asked for in questions 22-26. Answer questions 31 and 32 about yourself.

If your parents did not and will not file a 1982 U.S. income tax return, skip questions 21-25 and go on to question 26. Answer questions 26-30 using your parents' financial records. The records include statements of income that your parents earned in 1982 (for example, the W-2 form) and statements of nontaxable income that your parents got in 1982 (like social security, Aid to Families with Dependent Children (AFDC or ADC), Railroad Retirement Benefits, and disability and welfare benefits). Answer questions 31 and 32 about yourself.

If you (and your spouse) filed or will file a 1982 U.S. income tax return, continue with question 21. Fill in the answers in this Section using your (and your spouse's) 1982 U.S. income tax return (IRS Form 1040, 1040A, or 1040EZ) or other financial records. Make sure you answer all of the questions in the section marked "Tax Filers Only." If you are divorced, separated, or widowed and you filed or will file a joint tax return for 1982, give only your portion of the income and expenses asked for in questions 22-26. Don't answer questions 30, 31, and 32.

If you (and your spouse) did not and will not file a 1982 U.S. income tax return, skip questions 21-25 and go on to question 26. Answer questions 26-29 using your (and your spouse's) financial records. The records include statements of income that you (and your spouse) earned in 1982 (for example, the W-2 form) and statements of nontaxable income that you (and your spouse) got in 1982 (like noneducational social security, Aid to Families with Dependent Children (AFDC or ADC), Railroad Retirement Benefits, and disability and welfare benefits). Don't answer questions 30, 31, and 32.

21. Tax return figures.

If the 1982 U.S. income tax return has been filled out, check the box that says "from a completed return." For questions 22-25 copy the answers from the tax return.

Only if the 1982 U.S. income tax return has not been filled out, check the box that says "estimated." For questions 22-25 write in the figures that will be on the tax return. Use a blank 1982 U.S. income tax return to help you answer these questions.

22. Total number of exemptions for 1982.

Write in the number from Form 1040, line 6e or 1040A, line 5e. If you use the 1040EZ, write in "01."

Important: When figuring your income for questions 23, 26, 27, 30, and 31, don't include any earnings from student financial aid programs which are based on financial need. Need-based student aid includes earnings from the College Work-Study program and earnings from any other work program which you participated in based on your financial aid administrator's determination of financial need. If you had a job under a cooperative education program, and you got it based on your college's determination of your financial need, don't include earnings from

that job. If an amount that you copy from a U.S. income tax return includes earnings from a need-based student aid program, **subtract** them before you write in that amount.

23. Income for 1982 from U.S. income tax return.

If the U.S. income tax return for 1982 has been completed, write in the number from Form 1040, line 32; 1040A, line 12; or 1040EZ, line 3.

If the U.S. income tax return for 1982 has **not** been completed, it is strongly recommended that you complete one now.

Use the worksheet below **only** if you can't get a U.S. tax form.

Worksheet for question 23

Wages, salaries, tips, etc. (Don't include student financial aid.)	\$	.00
Interest income after IRS exclusion	+	.00
Dividends after IRS exclusion	+	.00
Other taxable income (alimony received, business and farm income, capital gains, pensions, annuities, rents, and all other taxable income)	+	.00
Add all the numbers in the column.	=	.00
Subtract IRS allowable adjustments to income (moving expenses, employee business expenses, payments to IRA and Keogh accounts, interest penalty for early withdrawal of savings, alimony paid, deduction for married couple when both work, and income received for permanent and total disability).	-	.00
This is your answer for question 23.	TOTAL \$	.00

24a. U.S. income tax paid for 1982.

Write in the amount from Form 1040, line 50; 1040A, line 19a; or 1040EZ, line 9. Don't include any FICA, self-employment, or other taxes. Don't copy the amount of "federal income tax withheld" from a W-2 Form.

24b. State and local income taxes paid for 1982.

Write in the total amount of state and local income taxes **actually paid** for 1982. This is the amount withheld minus any refund, or the amount withheld plus any additional amount due. Don't include sales, property, or any other taxes that are not taxes on income.

25. Itemized deductions for 1982.

Write in the amount from Form 1040, Schedule A, line 28. If deductions were not itemized or if a Form 1040A or 1040EZ was filed, write in "0." (Business or farm owner: Don't use amounts from Schedule C or F.)

26. Income earned from work in 1982.

Write in the amount of income earned from work in 1982 by (a) your father and (b) your mother.

If you skipped questions 21-25 because your parents did not and will not file a U.S. income tax return for 1982, include earnings from work in 1982. Add up the earnings from your parents' W-2 forms and any other earnings from work that are not included on the W-2.

If you answered questions 21-25, include the "wages, salaries, tips, etc." from your parents' Form 1040, line 7; 1040A, line 6; or 1040EZ, line 1. If your parents own a business or farm, also add in the amounts from Form 1040, lines 12 and 19.

Write in the amount of income earned from work in 1982 by (a) you and (b) your spouse.

If you skipped questions 21-25 because you (and your spouse) did not and will not file a U.S. income tax return for 1982, include your (and your spouse's) earnings from work in 1982. Add up the earnings from your (and your spouse's) W-2 forms and any other earnings from work that are not included on the W-2.

If you answered questions 21-25, include the "wages, salaries, tips, etc." from your (and your spouse's) Form 1040, line 7; 1040A, line 6; or 1040EZ, line 1. If you (or your spouse) own a business or farm, also add in the amounts from Form 1040, lines 12 and 19.

27. Other income and benefits for 1982 (nontaxable).

a. Social security benefits for 1982.

Write in the amount of social security benefits (including Supplemental Security Income) that your parents got in 1982. Don't give monthly amounts. Include the amounts that your parents got for their other children. Don't include your benefits, even if they are a part of your parents' social security check.

This question doesn't apply to you. Go to question 27b.

b. Aid to Families with Dependent Children (AFDC or ADC) for 1982.

Write in the total amount of benefits that your parents got in 1982 from Aid to Families with Dependent Children. (These are usually called AFDC or ADC benefits.) Don't give monthly amounts. Don't report social security benefits here.

Write in the total amount of benefits that you (and your spouse) got in 1982 from Aid to Families with Dependent Children. (These are usually called AFDC or ADC benefits.) Don't give monthly amounts. Don't report social security benefits here.

c. All other nontaxable income and benefits for 1982.

Add up your parents' other nontaxable income and benefits for 1982. Use the worksheet below.

Add up your (and your spouse's) other nontaxable income and benefits for 1982. Use the worksheet below.

Worksheet for question 27c

Child support received	\$	.00
Welfare benefits (except AFDC or ADC which you should have included in question 27b.)	+	.00
Unemployment compensation (Don't include any amount that you included in question 23.)	+	.00
Railroad Retirement Benefits	+	.00
Disability income	+	.00
Workman's Compensation	+	.00
CETA noneducational benefits	+	.00
Veterans benefits except educational benefits (Include Death Pension and Dependency & Indemnity Compensation (DIC) benefits.)	+	.00
Interest on tax-free bonds	+	.00
IRS interest and dividend exclusions including interest from All-Savers Certificates, etc.	+	.00
Untaxed portions of pensions & capital gains	+	.00
Housing, food, & other living allowances for military, clergy, & others (Include cash payments & cash value of benefits.)	+	.00
Any other nontaxable income and benefits such as Black Lung benefits, excess earned income credit, etc.	+	.00
ONLY if you are filling in the gray shaded areas, add in here the noneducational social security benefits that you and your spouse got in 1982. Noneducational benefits are the social security benefits you get even if you are not a college student, such as Supplemental Security Income or disability benefits.	+	.00
This is your answer for question 27c.	TOTAL \$	.00

(This worksheet continued on the next page.)

Don't include:

- Social security (if you are filling out the tan shaded areas)
- Any income reported in question 23, 26a, 26b, 27a, and 27b
- Money from student financial aid programs (educational loans, work-study earnings, grants, or scholarships)
- Veterans benefits for education (GI Bill, Dependents Educational Assistance Program, or VA Contributory Benefits)
- "Adjustments to Income" reported on the 1982 U.S. income tax return
- Gifts and support, other than money, received from friends or relatives
- Food stamps or tax-sheltered or deferred annuities

28. Medical and dental expenses in 1982 not paid by insurance.

Write in the amount of money that your parents **paid** in 1982 for medical and dental expenses. Don't include amounts covered by insurance or the cost of insurance premiums. If your parents itemized deductions on their 1982 U.S. income tax return, write in the total of lines 1, 5a, 5b, and 5c of Form 1040, Schedule A.

Write in the amount of money that you (and your spouse) **paid** in 1982 for medical and dental expenses. Don't include amounts covered by insurance or the cost of insurance premiums. If you (and your spouse) itemized deductions on your 1982 U.S. income tax return, write in the total of lines 1, 5a, 5b, and 5c of Form 1040, Schedule A.

29. Elementary, junior high, and high school tuition paid in 1982.

Write in the amount of money that your parents **paid** in 1982 for elementary, junior high, and high school tuition for their children. (Tuition doesn't include room, board, books, transportation, etc.) Don't include any tuition that your parents paid for you or any tuition for preschool or college. Also, don't include tuition paid by scholarships.

Write in the amount of money that you (and your spouse) **paid** in 1982 for elementary, junior high, and high school tuition for your children. (Tuition doesn't include room, board, books, transportation, etc.) Don't include any tuition that you paid for yourself or any tuition for preschool or college. Also, don't include tuition paid by scholarships.

Then skip to Section E.

30. Expected 1983 taxable and nontaxable income and benefits.

Write in the total amount of taxable and nontaxable income and benefits that your parents expect to get in 1983. Include the types of income that were asked for in questions 23, 27a, 27b, and 27c. If you skipped questions 21-25, include the types of income that were asked for in 26a, 26b, 27a, 27b, and 27c.

Answer questions 31 and 32 only if you are filling in the tan shaded areas. These questions are about the student.

31a. Student's (and spouse's) 1982 income.

If the student is divorced, separated, or widowed, don't include information for the spouse.

If you (and your spouse) filed or will file a 1982 U.S. income tax return, write in the amount from Form 1040, line 32; 1040A, line 12; or 1040EZ, line 3.

If a U.S. income tax return for 1982 has **not** been completed, it is strongly recommended that you complete one now.

If you (and your spouse) did not and will not file a 1982 U.S. income tax return, figure out the answer to question 31a using your (and your spouse's) financial records for 1982 income.

Include:

- Student's (and spouse's) wages, salaries, and tips (Don't include student financial aid.)
- Interest income and dividends after IRS exclusions
- Other taxable income (alimony received, business and farm income, capital gains, pensions, annuities, rents, and all other taxable income)

If you have any IRS allowable adjustments to income

(moving expenses, employee business expenses, payments to IRA and Keogh accounts, interest penalty on early withdrawal of savings, alimony paid, deduction for married couple when both work, and income received for permanent and total disability) **subtract** them from your total 1982 income.

31b. Student's (and spouse's) 1982 nontaxable income and benefits.

If the student is divorced, separated, or widowed, don't include information for the spouse.

Write in the amount of your (and your spouse's) 1982 nontaxable income and benefits.

Include:

- Social security benefits **except** educational benefits (Include Supplemental Security Income or disability benefits, etc.)
- Child support received
- Aid to Families with Dependent Children (AFDC or ADC)
- Welfare benefits
- Railroad Retirement Benefits
- Disability income
- Workman's Compensation
- Veterans benefits **except** educational benefits (Include Death Pension and Dependency and Indemnity Compensation (DIC) benefits.)
- CETA noneducational benefits
- Any other nontaxable income and benefits

Don't include social security educational benefits (benefits you get only because you are a college student), money from student financial aid programs (educational loans, work-study earnings, grants, or scholarships), or any income you reported in question 31a.

32. Student's (and spouse's) savings and net assets.

If the student is divorced or separated, don't include information for the spouse.

Add up the student's (and spouse's) assets.

Include:

- Money you have in cash, savings, and checking accounts (Don't include money from student financial aid programs.)
- Value of real estate and investments (See instructions for questions 34 and 35.)
- Value of your business and farm (See instructions for question 36.)

Subtract any amount you owe on these assets before you write in your answer.

Section E—Asset Information

Don't leave any of these questions blank. If a question doesn't apply to you, write in "0."

You must give information about your parents' assets in questions 33-36. Don't include money from student financial aid programs, such as grants, loans, and work-study. If you are giving information for only one parent and your parents have jointly owned assets, give only your parent's portion of the assets and debts. If your parents have assets owned jointly with someone else, give only your parents' portion of the assets and debts.

You must give information about your (and your spouse's) assets in questions 33-36. Don't include money from student financial aid programs, such as grants, loans, and work-study. If you are divorced or separated and you have jointly owned assets, or if you and your spouse have assets owned jointly with someone else, give only your (or your and your spouse's) portion of the assets and debts.

Don't include personal or consumer loans or any debts that are not related to the assets listed.

33. Cash, savings, and checking accounts.

Write in the amount of money that is in cash, savings, and checking accounts as of the date you complete this form.

34. Home.

Write in how much the home is worth. Use the price you would place on your home if it went on sale as of the date you complete this form. Don't use assessed, in-

Have you filled in the College Scholarship Service address on the front of the envelope and filled in your return address?

TO AVOID DELAY IN PROCESSING YOUR FAF—

1. Be sure you have entered your social security number and date of birth in questions 3 and 4.
2. Be sure you have listed at least one college in question 41.
3. Be sure the Certification section is signed by everyone completing the FAF.
4. Be sure all parts of the FAF are filled in, as asked for.
5. Be sure to send the right fee.

From: _____

Place
Stamp
Here.
U.S. Postal
Service will not
deliver mail
without postage.

College Scholarship Service

Box _____

City

State

Zip Code

sured, or tax value. A "home" includes a house, mobile home, condominium, etc. Renters write in "0."

Then write in how much is owed on the home including the present mortgage and related debts on the home. (Don't include interest due.) Check with the mortgage company if you don't know.

35. Other real estate and investments.

Write in how much other real estate and investments are worth as of the date you complete this form. Investments include trust funds, money market funds, stocks, bonds, other securities, commodities, precious and strategic metals, etc.

Then write in how much is owed on other real estate and investments.

36. Business and farm.

Write in how much the business and farm are worth as of the date you complete this form. Include the value of land, buildings, machinery, equipment, livestock, inventories, etc. Don't include how much the home is worth. (Home value should be given in question 34.)

Then write in what is owed on the business and farm. Include only the present mortgage and related debts for which the business and farm were used as collateral.

If your parents are not the sole owners, write in only their share of the total business and farm value and debt.

If you (and your spouse) are not the sole owners, write in only your (and your spouse's) share of the total business and farm value and debt.

All students must fill in Sections F and G.

Section F—Student's (and Spouse's) Expected Income and Benefits

Questions 37-40 ask about income and benefits you expect to get. Answer these questions as accurately as you can. If a question doesn't apply to you, or if you don't expect to get any income or benefits from that source, don't leave it blank; write in "0."

37a. Write in the total amount of taxable income that (a) you and (b) your spouse expect to get during the 3-month summer of 1983 and the 9-month school year of 1983-84.

Include:

- Wages, salaries, and tips
- Interest and dividend income
- Any other income that will be earned or will be taxed

Don't include earnings from student financial aid, such as College Work-Study. If your job is awarded by the financial aid administrator at your college and is need-based (or is under a need-based cooperative education program), it is considered student financial aid. Don't include earnings from that job.

38. Include in this question the social security benefits that you get only because you are a student (social security educational benefits). Write in the amount of social security educational benefits you will get per month from July 1, 1983 through June 30, 1984, and the number of months during this time that you will get these benefits. Include only your own benefits. Don't include educational benefits from other sources, such as Black Lung or Railroad Retirement Benefits.

39. Write in the amount of veterans educational benefits that you will get per month from July 1, 1983 through June 30, 1984, and the number of months during this time you will get these benefits. Include only what you will get from the GI Bill and Dependents Educational Assistance Program.

Don't include Death Pension, Dependency and Indemnity Compensation (DIC), VA Contributory Benefits, or spouse's GI Bill.

40. Write in the amount of other nontaxable income and benefits that you (and your spouse) expect to get from July 1, 1983 through June 30, 1984.

Include:

- Social security benefits, except the educational benefits that you included in 38.
- Child support received
- Aid to Families with Dependent Children (AFDC or ADC)
- Welfare benefits
- Unemployment compensation (Don't include any unemployment compensation that you included in question 37a or 37b.)

- Disability income
- Workman's Compensation
- Veterans benefits such as Death Pension and Dependency and Indemnity Compensation (DIC) benefits (Don't include the benefits that you gave in question 39 or VA Contributory Benefits.)
- Spouse's GI Bill
- Interest on tax-free bonds
- IRS interest and dividend exclusions, including interest from All-Savers Certificates, etc.
- Untaxed portions of pensions and capital gains
- Housing, food, and other living allowances for military, clergy, and others (Include cash payments and cash value of benefits.)
- CETA noneducational benefits
- Any other nontaxable income and benefits, including Black Lung or Railroad Retirement Benefits, etc.

Don't include food stamps, any of the income or benefits that you reported in questions 37, 38, and 39, or money from student financial aid programs (educational loans, work-study earnings, grants, or scholarships).

Section G—Other Information and Signatures

41. Give the full name, address, CSS code number, and housing code for each college and program that you want to get information from this FAF. Don't leave this question blank. Don't list federal student aid programs. Be sure you enclose the right fee.

You will find the code numbers in the CSS code list at the back of this booklet. Colleges on the code list are listed alphabetically within the state in which they are located. If a state has one or more state scholarship programs, they are printed at the beginning of the state's listing in **bold type**. A dash (—) to the left of a college means that it is a campus or branch of a college or university system.

The inclusion of a college on the CSS code list doesn't necessarily mean that the college requires the FAF. Check with the college if you're not sure. Be sure to use only CSS code numbers in question 41. If you use a wrong code number, your FAF will be sent to the wrong college. If you can't find a code number for a college, be sure that the college needs a copy of your FAF. Then, write in the name and address of the college, but leave the space for the CSS code number blank. CSS will write in the code number for you.

42. Check the box that shows the number of colleges and programs listed in question 41. Write your check or money order for the total amount made out to the College Scholarship Service. Send it with your FAF to the CSS. If you don't send the right fee with your FAF, the form can't be processed and it will be returned to you.

43. Check "Yes" if you want the CSS to send information from your FAF to the U.S. Department of Education. Answer "Yes" if you want to be considered for the Pell Grant, Supplemental Educational Opportunity Grant, College Work-Study, National Direct Student Loan, or Guaranteed Student Loan programs. Answer "No" if you don't want to be considered for such aid. If you leave the answer to this question blank, it will be counted as "No."

44a. & b. If you answer "Yes" to a and/or b, the U.S. Department of Education may send information from this form to (a) the state financial aid agency in your state and/or (b) the first college in question 41. Check "No" if you don't want your information sent.

You should know that all state agencies and most colleges that use the FAF require that you have a CSS analysis of your information sent to them. Answering "Yes" to 44a and 44b will not, in most cases, meet agency and college application requirements. Normally, you must also ask that the CSS analysis be sent to the state agency and colleges.

Certification: You must sign this form. If you are married, your spouse must sign this form. If you filled in the tan shaded areas, at least one of your parents must also sign this form. **Everyone signing this form is certifying that all of the information on the form is correct** and that everyone is willing to give documents (such as a 1982 U.S., state, or local income tax return) to prove that the information is correct.

Don't sign or date the form before January 1, 1983.

SIDE II

Because some of the questions on Side II of the FAF are self-explanatory, the instructions below are only for questions that may need some explanation.

Section H—Student's Information (continued)

- 49.** If you are entering college as a first-time student, write in your high school six-digit code number. You can get the code number from your high school counselor's office. Also, give the name of your high school.
- 50.** Write in the name of the degree or certificate which you are now working toward. For example, if you are now working toward your bachelor's degree, list "BA" or "BS" even though you eventually plan to get a master's degree. Also, write in the date that you expect to get the degree or certificate.

Section I—Parents' Information

If you are filling in the tan shaded areas, give parents' information in questions 52-60.

52a.-52h. These questions ask for a breakdown of the income given in question 23.

- a.** Write in the amount of earnings from work by your father (or stepfather or guardian) that will be claimed on his U.S. income tax return. Under 1982, include the amounts from his 1982 Form 1040, line 7; 1040A, line 6; or 1040EZ, line 1. If your parents file a joint return, give only the amount of your father's income.
- b.** Write in the amount of income earned from work by your mother (or stepmother or guardian) that will be claimed on her U.S. income tax return. Under 1982, include the amounts from her 1982 Form 1040, line 7; 1040A, line 6; or 1040EZ, line 1. If your parents file a joint return, give only the amount of your mother's income.
- c.-h.** If your parents are married and will file separate U.S. income tax returns, add the figures from both returns and write in the total when you answer questions 52c-52h.
- c.** Write in the amount of your parents' interest income after IRS exclusion. Under 1982, give the amount reported on your parents' 1982 Form 1040, line 8; 1040A, line 7; or 1040EZ, line 2.
- d.** Write in the amount of your parents' dividends after IRS exclusion. Under 1982, give the amount reported on your parents' 1982 Form 1040, line 9c or 1040A, line 8c.
- e.** Write in the amount of your parents' net income (or loss) from a business or farm. Under 1982, include the amount reported on your parents' 1982 Form 1040, lines 12 and 19.
- f.** Write in the amount of other taxable income (or loss) other than wages, interest, dividends, and business and farm income received by your parents. Under 1982, give the amounts reported on your parents' 1982 Form 1040, lines 10, 11, 13-16, 17b, 18, 20b, and 21 or 1040A, line 9b. List the kinds of income and amounts in question 69.
- g.** If your parents filed a 1982 IRS Form 1040, write in the amount paid to an IRA/Keogh retirement account, as reported on lines 25 and 26. Don't include itemized deductions. Give only the amount allowed by IRS.
- h.** If your parents filed a 1982 IRS Form 1040 or 1040A, give the total amount of other adjustments to income, other than IRA/Keogh payments. If the 1040 was filed, write in what was reported on lines 23, 24, and 27-30 and, if the 1040A was filed, write in what was reported on line 11. Don't include itemized deductions. Give only amounts allowed by IRS. See the worksheet for question 23 for a listing of allowed adjustments. List the kinds of adjustments and amounts in question 69. If adjustments are not listed, they will not be allowed.
- 53a.** Write in the same amount of social security benefits that you gave for 1982 in question 27a.

b. Write in the same amount of Aid to Families with Dependent Children that you gave for 1982 in question 27b.

c. Write in the same amount of other nontaxable income and benefits that you gave for 1982 in question 27c. List the kinds of income and amounts in question 69.

54g. & 55g. Check "Yes" if your current employer has a pension plan, other than social security, from which you will eventually get benefits.

Section J—Student's Information (continued)

61a.-61k. Estimate the figures for the 3-month summer of 1983 and the 9-month school year of 1983-84.

- a.** Write in the amount of wages you will earn. Don't include income for work that you get through student financial aid programs.
- b.** Write in the amount of wages your spouse will earn. Don't include income for work that your spouse gets through student financial aid programs.
- c.** Write in the amount of all taxable income other than wages. Include interest, dividends, and other taxable income.
- d.** Write in the amount of social security educational benefits that you will get for yourself.
Don't include noneducational benefits or the benefits for anyone else. Include these amounts in question 61k.
- e.-f.** Write in the amount of veterans educational benefits you will get. Include only what you will get from VA Contributory Benefits, from the GI Bill, and from the Dependents Educational Assistance Program.
Don't include Death Pension and Dependency and Indemnity Compensation. Include these amounts in question 61k.
- g.** Write in the amount of Aid to Families with Dependent Children (AFDC or ADC) that you will get.
- h.** Write in the amount of support that you will get from your parents. (Support includes money, gifts, loans, housing, food, clothes, car, medical and dental care, payment of college costs, etc.)
- i.** Write in the amount of support that your spouse will get from his or her parents. (See the definition of support in 61h above.)
- j.** Write in the total amount of grants, scholarships, fellowships, loans, and other financial aid that **you have actually been awarded**. List the kinds of aid and the amount of each in question 69.
- k.** Write in the amount of other nontaxable income that you (and your spouse) will get.

Include:

- Social security benefits, except those given in question 61d.
- Child support received
- Welfare benefits (except AFDC or ADC)
- Unemployment compensation (Don't include any unemployment compensation that you included in question 61c.)
- Disability income
- Workman's Compensation
- Veterans benefits such as Death Pension and Dependency and Indemnity Compensation benefits (Don't include the benefits that you gave in question 61e or 61f).
- Spouse's GI Bill
- Interest on tax-free bonds
- IRS interest and dividend exclusions, including interest from All-Savers Certificates, etc.
- Untaxed portions of pensions and capital gains
- Housing, food, and other living allowances for military, clergy, and others (Include cash payments and cash value of benefits.)
- CETA noneducational benefits
- Any other nontaxable income and benefits, including Black Lung or Railroad Retirement Benefits, etc.

Double-check your FAF to make sure it is complete and accurate. Be sure it has the necessary signatures on Side I. Keep this booklet handy. You will need it later.

See instructions for question 41 (page 7) before using this list

1404 Lewis University
1405 Lincoln Christian College
1406 Lincoln College
3149 Lincoln Technical Institute

Broward Community College:
5074 —Fort Lauderdale (Central)
5741 —Hollywood (South)
5735 —Pompano Beach (North)
5127 Central Florida Comm. Coll.
5743 Chas. Williams Coll. (Ala.)

1412	Loop College	16046	Brian Cliff College	1409	Lindsey Wilson College	3530	Hopkins University	3514	Massachusetts Inst. of Tech.	15201	Community College:
1412	Loyola University of Chicago:	6047	Buena Vista College	17539	Louisville Coll. of Med. & Dent.	3532	Arts and Sciences	3515	Massachusetts Maritime Acad.	1521	—Mount Clemens
1755	—Niles College	6087	Central College	1407	Careers	3533	—Evening College	3549	Massachusetts Community College	1522	—Warren
1426	—School of Dentistry	6099	Clarke College	15173	Louisville School of Art	3534	Marshall College	3550	Merrimack Community College	1472	Merrimack College
1430	—Stritch School of Medicine	6100	Claremont Community College	17439	Louisville Technical Inst.	3535	—School of Engineering	3554	Midwestern Community College	1452	Marygrove College
1520	McCormac Junior College	6101	Col. of Osteopathic Med. & Surg.	15440	Madisonville Community College	3536	—Sch. of Hygiene & Pub. Health	3559	Mount Holyoke College	1493	Mercy Central Sch. of Nursing, Grand Rapids
1435	MacMurray College	6162	Col. of Osteopathic Med. & Surg.	15610	May State Voc. Tech. Sch.	3542	Sch. of Medicine	3520	Mount Ida Junior College	1460	—Grand Rapids
1456	McKendree College	6119	Corneil College	1487	Mayville Community College	3543	Midway College	3539	Mount Ida Junior College	1493	—Grand Rapids
1470	Michigan College	6177	De Moines Area Comm. Coll., Arkany	1467	Morehead State University	3544	—Chase Law School	3520	Mount Ida Junior College	1493	—Grand Rapids
1484	Monmouth College	6174	Divine Word College	1574	Murray State University	3545	Owensboro Jr. Coll. of Business	3521	New England Baptist Hospital	3126	Mercy Sch. of Nursing, Detroit
1486	Moody Bible Institute	6171	Dort College	1574	Northern Kentucky University:	3546	Pikeville College	3522	New England College of Music	3718	Michigan Parapersonal Inst.
1498	Murden College	6168	Drake Hospital	16196	—Chase Law School	3547	Prentissburg Community Coll.	3523	New England College of Music	3718	Michigan Parapersonal Inst.
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1498	Murden College	6168	Drake Hospital	16196	—Chase Law School	3547	Prentissburg Community Coll.	3523	New England College of Music	3718	Michigan Parapersonal Inst.
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1498	Murden College	6168	Drake Hospital	16196	—Chase Law School	3547	Prentissburg Community Coll.	3523	New England College of Music	3718	Michigan Parapersonal Inst.
1498	Murden College	6168	Drake Hospital	16196	—Chase Law School	3547	Prentissburg Community Coll.	3523	New England College of Music	3718	Michigan Parapersonal Inst.
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1498	Murden College	6168	Drake Hospital	16196	—Chase Law School	3547	Prentissburg Community Coll.	3523	New England College of Music	3718	Michigan Parapersonal Inst.
1498	Murden College	6168	Drake Hospital	16196	—Chase Law School	3547	Prentissburg Community Coll.	352			

[illegible]

tion, whose code number is 0558. This request should be made on the test registration form.

- If student does not list the Massachusetts Board of Regents of Higher Education on the test registration form, an Additional Report Request Form must be sent to the College Board by January 22, 1983, requesting the release of the student's SAT scores to the Massachusetts Board of Regents of Higher Education, code 0558.
- Honor renewal candidates need file no forms. Renewal is based solely on maintaining good academic standing and continued full-time enrollment at an eligible college.

Notification Procedures

Freshman applicants who qualify for the Honor Scholarship will receive notification of an award offer or alternate status in May 1983. Awards will be paid directly to the college by semester.

II. Fire, Police, and Correction Scholarship Program

Students whose parent's death occurred in the line of duty as a police, fire, or correction officer are eligible.

Requirements

- Parent died in the line of duty as a Massachusetts police, fire, or correction officer.
- Enrollment full time at a Massachusetts public college or university (See Section F for list.)
- Permanent legal resident of Massachusetts since September 1, 1982.

Award Values

Cost of tuition for up to four years of undergraduate study at a Massachusetts public institution.

Application Procedures and Deadlines

- Submit to: Fire, Police, and Correction Scholarship Program, Board of Regents of Higher Education, 330 Stuart St., Boston, MA 02116, a certificate from the Retirement Board indicating that the student's parent's death was in the line of duty and a request for a Fire/Police/Correction application. MBOR will then send the student an application, which is to be completed and returned to this office. These requests should be sent to the Board of Regents of Higher Education between January 1 and May 1, 1983, for 1983-84 consideration. If they are submitted after May 1, 1983, the Board will process them if funds are available.
- Renewal applicants need file no forms. Renewal is based solely on

maintaining satisfactory progress in accordance with the standards of the institution and continued full-time enrollment at an eligible institution.

Notification Procedures

Applicants who qualify for a Fire, Police, and Correction Scholarship will be so notified. The awards will be paid directly to the college.

III. War Orphans Scholarship Program

This program provides financial assistance to students who are children of deceased veterans when the parent's death was service-connected. Reimbursement of educational expenses is available for up to four years.

Requirements

- The veteran's death must be determined by the Veterans Administration to be service-connected.
- Deceased parent must have been a veteran of World War I or II, Korean Conflict, or Vietnam Conflict.
- Veteran's service must be credited to Massachusetts.
- Student must have lived in Massachusetts for at least one year or have been born in Massachusetts.
- Student must be between the ages of 16 and 24.
- No more than three years of previous awards may have been received.
- Student must attend or have attended an eligible postsecondary institution as determined by the MBOR.

Award Values

The student can receive up to \$750 per year as reimbursement of educational expenses for up to 4 years.

Application Procedures

Request an application from the Massachusetts Board of Regents of Higher Education War Orphans Unit, 330 Stuart St., Boston, MA 02116. With the application you will be requested to provide your birth certificate, your parent's death certificate, and a certificate from the War Records Office indicating that your parent's war service was credited to Massachusetts. A student can apply for this reimbursement up to two years after the educational expenses were incurred.

Notification Procedures

If your scholarship is approved, you will be sent an award letter along with reimbursement claim forms. This award is paid directly to the student as reimbursement for educational expenses already incurred.

MASSACHUSETTS STATE SCHOLARSHIP PROGRAM GUIDELINES FOR THE 1983-84 ACADEMIC YEAR

Program	Form to File	Filing Deadline	Mass. Resident	Where Awards May Be Used	Award Value
General Scholarship New Applicants	MFAF Sides I and II	3/1/83	since 9/1/82	• Massachusetts institutions approved for degree authority • Certain one-year programs at Massachusetts public and nonprofit institutions (See Section A.) • Certain two-year programs at Massachusetts proprietary institutions (See Section A.) • Regionally accredited degree-granting institutions in Connecticut, Maine, Maryland, New Hampshire, Pennsylvania, Rhode Island, Vermont, and the District of Columbia	\$300-\$900
Renewal Applicants	MFAF Sides I and II	3/1/83	since 9/1/82	Same as above, with one exception: Students who received these awards in 1979-80, 1980-81, 1981-82, and 1982-83 may also use them again in 1983-84 at regionally accredited degree-granting institutions in all states and at those institutions listed in Section C.	
Massachusetts State Medical and Dental Scholarships	MFAF Sides I and II	3/1/83	since 9/1/79	Professionally approved graduate schools of medicine and dentistry as listed in Section D.	\$600-\$900
Honor Scholarships	Request College Board to send SAT scores to MBOR, 0558	SAT scores must be requested by 1/22/83 Renewals: no form needed.	since 9/1/82	Massachusetts public four-year institutions as listed in Section E.	cost of tuition
Fire, Police, and Correction Scholarship	Send certificate from Retirement Board to MBOR. Request application.	5/1/83 Renewals: no form needed.	since 9/1/82	Massachusetts public colleges and universities as listed in Section F.	cost of tuition
War Orphans Scholarship	Request form from MBOR.	Up to two years after educational expenses incurred	Born in Mass. or Mass. resident for one year	Postsecondary institution as determined to be eligible by MBOR.	up to \$750

INSTRUCTIONS FOR COMPLETING THE MFAF

Follow the MFAF instructions carefully for completing Side I questions 1-45 and Side II questions 46-69. In addition to the FAF instructions, please follow these special instructions for Massachusetts State Scholarship consideration.

- 1-13.** The student, not the parents, should complete questions 1-13.
- 2.** This address is to be your permanent, legal residence in Massachusetts. A non-Massachusetts address cannot be used for state scholarship consideration. Be sure that your address and zip code are correct. Forms without zip codes or with incorrect zip codes cannot be processed.
- 3.** **You must provide a social security number.** If you do not have one, apply for one before completing this form. This number is used to identify your case. Your application for a state scholarship cannot be processed without it.
- 5.** Enter the two-letter abbreviation for your state of legal residence. If you are a permanent legal resident of Massachusetts (refer to definition on front cover), write in MA. If you are a legal resident of another state, refer to the list of state abbreviations on the third page of this packet. If you are a dependent student, your state of legal residence is the same as that of your parents.
- 41.** List the institution(s) to which you want copies of this form sent. Their CSS code numbers can be found in the CSS code list or in Sections C-F below. **Do not list the Massachusetts State Scholarship Program.**

- 42.** To calculate the fee to be sent to CSS count the number of institutions (programs) named in MFAF Item 41. If you checked the box in MFAF Item 42, add \$2.50 to the fee to be sent to CSS.
- 43.** If you are applying for the General Scholarship, **you must check "Yes!"** General Scholarship applicants are required to apply for the Pell Grant Program and to authorize release of their form to the State Scholarship Program. Medical and Dental Scholarship applicants also check "Yes!"
- 45.** This question is the special section for Massachusetts state scholarship candidates. It must be completed as follows:
 - a. All candidates.** Enter the month and year that your permanent, legal residence in Massachusetts began. For example, if your residence began in April 1972, fill in the boxes like this:

04

72

b-c. These two questions are for graduate students only. You must check one of these if you wish consideration for a Medical or Dental Scholarship.

- Check 45b if you will be enrolled in a graduate program leading to an M.D. degree.
- Check 45c if you will be enrolled in a graduate program leading to a D.D.S. or a D.M.D. degree.

SECTION C

CANADIAN AND OTHER NON-U.S. INSTITUTIONS FOR GENERAL SCHOLARSHIPS—RENEWALS FROM 1979-80, 1980-81, 1981-82, AND 1982-83 ONLY

0901 Acadia University, Nova Scotia	0873 Inter-American Univ. of Puerto Rico, Hato Rey	0953 St. Francis Xavier University, Nova Scotia	0976 University of New Brunswick
0906 Bishops University, Quebec	0935 McGill University, Montreal	0958 St. Mary's University, Geo. Williams	0993 University of Ottawa
0910 Catholic University of Puerto Rico	0936 McMaster University, Ontario	0999 Simon Fraser University, British Columbia	0941 University of Prince Edward Island
0932 Concordia University, Loyola, Montreal	0885 Memorial University, Newfoundland	0896 Trent University, Ontario	0874 University of Puerto Rico, Humacao
0956 Concordia University, Geo. Williams	0939 Mount Allison University, New Brunswick	0990 Univ. of King's College, Nova Scotia	0912 University of Puerto Rico, Mayaguez
0915 Dalhousie University, Nova Scotia	0811 Nova Scotia College of Art & Design	0931 University of Laval, Quebec	0982 University of Toronto
0946 Inter-American Univ. of Puerto Rico, San German	0949 Queen's University, Kingston, Ontario	0992 University of Montreal	

SECTION D

APPROVED GRADUATE SCHOOLS OF MEDICINE AND DENTISTRY FOR MEDICAL AND DENTAL SCHOLARSHIPS

Medical Schools

2947 Albany Medical College
2997 Albert Einstein College of Medicine
6052 Baylor College of Medicine, Houston
3116 Boston University Medical School
5084 Bowman Gray Medical School
3117 Brown University Medical School
1104 Case Western Reserve Medical School
2173 Columbia University College of Physicians & Surgeons
6139 Creighton University Medical School
0915 Dalhousie University, Halifax, Nova Scotia
3356 Dartmouth Medical School
5152 Duke University Medical School
5197 Emory University Medical School
M601 Far Eastern University, Manila
M602 George Washington University Medical School
5281 Georgetown University Medical School
2285 Hahnemann Medical College
3450 Harvard Medical School
5307 Howard University Medical School
5346 Johns Hopkins University Medical School
6342 Kirkville College of Osteopathic Medicine
4062 Loma-Linda University Medical School
1420 Loyola Univ., Chicago, Stritch School of Medicine
0935 McGill University
2980 Medical College of Pennsylvania
1519 Medical College of Wisconsin
1458 Meharry Medical College
2464 Mt. Sinai School of Medicine, CUNY
2578 New Jersey College of Medicine, Dentistry
2553 New York Medical College
2581 New York University Medical School
1547 Northwestern University Medical School
2660 Pennsylvania State University
2705 Hershey Medical Center
2662 Philadelphia College of Osteopathic Medicine
6720 St. Louis University Medical School
4758 Stanford University Medical School

2925 SUNY, Buffalo Medical School
2534 SUNY Downstate Medical Center
2547 SUNY Upstate Medical Center
2691 SUNY Health Science Center, Stony Brook
2917 Temple University
2336 Thomas Jefferson University Medical College
3896 Tufts University Medical School
M603 Universidad Autonoma de Guadalajara, Mexico
1992 University of Alabama School of Medicine
4879 UCLA Medical School
4885 Univ. of California, San Francisco Medical School
1991 Univ. of Chicago, Pritzker School of Medicine
1969 University of Cincinnati College of Medicine
4877 University of Colorado Medical Center
3934 University of Connecticut Medical School
M602 University of Graz, Austria
6332 University of Health Science, Kansas City
1968 University of Kentucky College of Medicine
M604 University of Liege, Belgium
1967 University of Louisville Medical School
3936 Univ. of Massachusetts, Medical School, Worcester
5751 University of Maryland Medical School
1868 University of Michigan Medical School
6910 University of Minnesota Medical School
0899 University of Navarra, Spain
6896 University of Nebraska Medical Center
3751 University of New England
5752 University of North Carolina Medical School
6911 University of North Dakota School of Medicine
6902 University of Oklahoma Health Science
M605 University of Padova, Italy
M606 University of Pavia, Italy
2951 University of Pennsylvania Medical School
2949 University of Pittsburgh Medical School
2948 University of Rochester Medical School
M607 University of Rome, Italy
6908 University of Texas Health Science Center, San Antonio
6686 University of Texas Health Science Center, Dallas
3935 University of Vermont Medical School

5753 Univ. of Virginia, Charlottesville Medical School
1883 Vanderbilt University Medical School
5408 Virginia Comm. Univ. Health School Division
6952 Washington Univ., St. Louis Medical School
1949 Wayne State University Medical School
3990 Yale University Medical School

Dental Schools

3116 Boston University
1105 Case-Western Reserve University
2094 Columbia University Dental School
5187 Emory University
2249 Fairleigh Dickinson University Dental School
5259 Georgetown University Dental School
3430 Harvard Univ. School of Dental Medicine
5297 Howard University
4062 Loma-Linda University
1426 Loyola University Chicago School of Dentistry, Illinois
1448 Marquette University
1458 Meharry Medical College
2578 New Jersey College of Medicine, Dentistry
2597 New York University School of Dentistry
1565 Northwestern University
2925 SUNY at Buffalo
2891 SUNY Health Science Center at Stony Brook
2917 Temple University
8158 Tufts University
4879 UCLA Dental School
3838 Univ. of Connecticut School of Dental Medicine
1835 University of Detroit
1838 University of Louisville
5755 University of Maryland Dental School
2944 University of Pennsylvania School of Dental Medicine
2927 University of Pittsburgh Dental School
4893 University of Southern California Dental School
5904 University of West Virginia
5408 Virginia Comm. University, Health Science Div., Richmond
6929 Washington University, Missouri

SECTION E

ELIGIBLE INSTITUTIONS FOR USE OF HONOR SCHOLARSHIPS

Massachusetts public four-year institutions:

3517 Bridgewater State College	3522 Salem State College
3518 Fitchburg State College	3786 Southeastern Massachusetts University
3519 Framingham State College	3911 University of Lowell
3516 Massachusetts College of Art	3917 University of Massachusetts—Amherst
3515 Massachusetts Maritime Academy	3924 University of Massachusetts—Boston
3521 North Adams State College	3523 Westfield State College
	3524 Worcester State College

SECTION F

ELIGIBLE INSTITUTIONS FOR USE OF FIRE, POLICE, AND CORRECTION SCHOLARSHIPS

These awards may be used at the 13 Massachusetts institutions listed in Section E and at the 15 community colleges listed below:

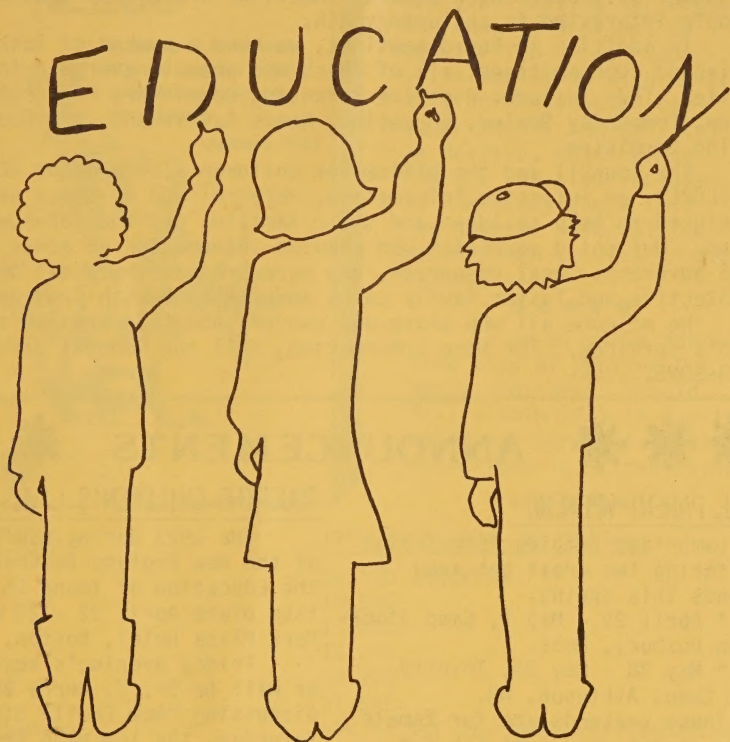
3102 Berkshire C.C.	3437 Holyoke C.C.	3651 North Shore C.C.
3110 Bristol C.C.	3294 Mass. Bay C.C.	3674 Northern Essex C.C.
3123 Bunker Hill C.C.	3549 Massasoit C.C.	3714 Quinsigamond C.C.
3289 Cape Cod C.C.	3554 Middlesex C.C.	3740 Roxbury C.C.
3420 Greenfield C.C.	3545 Mt. Wachusett C.C.	3791 Springfield Technical C.C.



NO KIDDING

NEWSLETTER OF THE SOMERVILLE COUNCIL FOR CHILDREN

APRIL, 1983



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The Somerville Council for Children is a child advocacy group, made up of folks who live or work in Somerville, dedicated to improving the community's youth and children's services.

Our Board will meet the second Wednesday of February, April and June, 1983, at 7:30 PM, at the Somerville Multi-Service Center, 1 Summer St., near Union Square. Meetings are always open to all people interested in children/youth.

In addition to Board meetings, we have a number of task-oriented subcommittees, all of which are open to everyone in Somerville. They include: Positive Parenting Committee, Proposal Review, Community Review, Education, Needs Assessment, and Coordinating Committee.

The Council and the Office for Children also sponsor HELP FOR CHILDREN, an intensive information, referral and advocacy service designed to help children and their families get the services they need. Our child advocates can provide information on areas such as 766 advocacy, legal resources, day care programs, medical services, protective and foster family care, and mental health programs.

We welcome all who share our concern about Somerville's children's services. For more information, call the Council office at 623-5096.



ANNOUNCEMENTS



SINGLE PARENT WEEKEND

Cambridge Camping Association is offering two great get-away weekends this Spring:

* April 29 - May 1, Camp Stockade in Duxbury, Mass.

* May 28 - May 30, Trinity House Camp, Atkinson, NH.

These weekends are for female single parents and cost \$15 for parent, and \$8 each child. A program will be planned for the children.

Space is limited, so reserve early. For more information, contact CCA at 99 Bishop Allen Drive, Cambridge (864-0960).

TOUCHING CHILDREN'S LIVES

The 1983 Spring Conference of the New England Association for the Education of Young Children will take place April 22 - 23 at the Park Plaza Hotel, Boston.

Friday evening's keynote speaker will be Dr. T. Berry Brazelton discussing "New Family Styles". On Saturday, the luncheon keynote speaker will be Representative Saundra Graham, on the topic "Budget Cuts and Education in the '80s".

For more information, contact the NEAEC Coordinator: Rogal Boston, 72 Langley Road, Newton Centre, MA., (617) 965-1000.



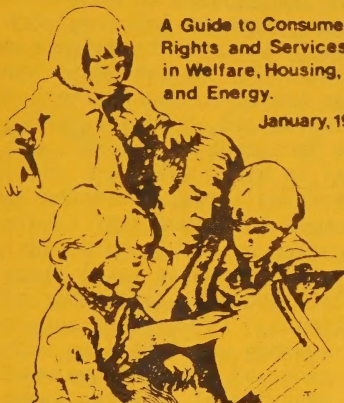
ANNOUNCEMENTS



MEETING OUR NEEDS

A Guide to Consumer
Rights and Services
in Welfare, Housing,
and Energy.

January, 1983



The Community Action Agency of Somerville (CAAS) has just completed publication of a consumer handbook entitled Meeting Our Needs. The book is designed to provide low-income Somerville residents with up-to-date information on consumer rights and services in Welfare, Housing and Energy. It also includes an emergency phone list and general referral to other human service programs in Somerville.



To be eligible for a free copy of Meeting Our Needs, residents should fall within 175% of Health and Human Services Poverty Guidelines as stated below:



Family Size

1
2
3
4
5
6
more than 6

175% of Poverty Guidelines

\$8,190 annually
10,885
13,580
16,275
18,970
21,665
add \$1,540 for each additional member

If you are ineligible for a free copy, you may purchase one for \$4.00 per copy (discounted for more than ten copies). Handbooks may be picked up at: CAAS, 265 Washington St., Somerville. CAAS will also be sponsoring community workshops around the use of the handbook. For more information, please call Mary Lou Lawson at CAAS, 623-7370.



BUDGET JUSTICE

By Judith de la Paz

What's behind the recent "earmarking" controversy? Coalition for Quality Education member Judith de la Paz explores the school system funding process and suggests "aggressive emergency treatment" for Somerville's ailing educational system.

Public education, under constant attack since 1980 from cutbacks in federal aid, the state-mandated 4% tax cap and local implementation of Prop 2½, has finally won a victory, albeit symbolic, on the homefront (in Somerville). With the adoption of the "earmarking" resolution on March 10th, our local Board of Aldermen (BOA) has clearly stated its concern for and commitment to the children of this city. Given the repeal of School Committee fiscal autonomy, Aldermen now bear an even greater share of the governmental burden; that Aldermen Puglia, Bakey, Albano, Mackey, Ciampa, John McKenna and Michael McKenna were willing to accept not only a financial responsibility for the School Department, but a moral one as well is a source of great encouragement and awakening optimism for the members of the educational community.

Lest the reader assume that the road to earmarking was smooth and the journey uneventful, please let me state at the outset that such was not the case. On the state level, various organizations with unlimited financial and professional resources - the Massachusetts Municipal Association (MMA) and Citizens for Limited Taxation (CLT) in particular - registered their extreme opposition to this issue very early

on in the debate; at present, of course, they are lobbying very strongly against its passage on Beacon Hill. On the local level, Mayor Brune, as Somerville's chief executive and, coincidentally, current President of the MMA, was quite vocal in his displeasure with the earmarking issue, characterizing our attempts to secure fair funding for education as little more than an effort to compromise local fiscal flexibility and devastate other city departments. It was thus apparent that the journey would be long and arduous, the tenor of the dialogue emotional and adversarial, and the eventual outcome extremely important in the messages it would convey to all of the major participants and the community-at-large.

The journey began with Coalition (for Quality Education) attendance at a series of Taxation Seminars at the State House sponsored by Senator John Olver, Chairman of the Joint Taxation Committee. In an attempt to learn more about municipal finance and the funding of public education, Coalition members Karen Donnelly, Somerville Teachers Association President Bob Murphy and I concentrated on those areas or issues directly related to educational fund-

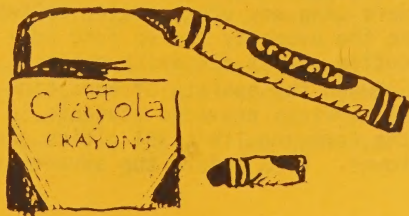
ing sources. Earmarking soon emerged as the issue of most immediate concern.

Although there are currently several bills in the Legislature that address the issue of earmarking a certain portion of new local aid for public education, the most comprehensive is that proposed by the MTA and filed jointly by Sen. D'Amico and Rep. Collins. Under this bill, the School Dept. would be guaranteed a specific percentage of new local aid, that portion to be based on the percentage of the total city budget that was allocated to the School Department in fiscal year 1982. Conversely, if the city were forced to cut the school budget under Phase 3 of Prop 2½, that cut could not exceed the above-mentioned percentage. There are two (2) additional provisions in this bill that are also extremely important and worth noting. Any increased funding for education must be linked to both earmarking and a provision for "maintenance of local effort". In essence, a maintenance of local effort means that the city could not reduce the amount of money allocated to the School Department in anticipation of new local aid; without this provision, Somerville could cut the school budget by a certain amount, return that exact amount from new local aid, and thus effect a level-funded budget. The essence of the earmarking measure is to provide additional funding for public education according to a fair and equitable formula; the maintenance of local effort provision assures that equity.

Of interest to local governing bodies is the over-ride provision of the MTA bill. That portion of new local aid allocated to the School Department could be either increased or decreased by as much as 10% by a 2/3 vote on the BOA; thus Board members could vote to decrease that allocated amount and divide the excess funds among departments they might deem more needy. Earmarking will not emasculate other city services; it is merely a one-year statement, an attempt to answer the needs of school systems in communities where Prop 2½ did indeed emasculate education.

From a historical perspective, the Coalition definitely felt that there was a need for the protection outlined in the earmarking bill, given the devastation wreaked on the Somerville public school system under Prop 2½. But Somerville was not alone. According to a report prepared by the State Department of Education on the effect of Prop 2½ on Massachusetts school districts for 1981-1982, School Committee expenditures actually increased by approximately 1%. Conclusion: schools, statewide and in Somerville, had to bear the brunt of budget cuts under Prop 2½.

(next page)



Budget Justice --

Thus the journey that began at a taxation seminar on Beacon Hill and ended so successfully in the BOA chambers was one of hard work, countless hours of research and document preparation, and long, emotionally-charged meetings where the issues were hotly debated and the metal of all concerned sorely tested. For us, the members of the Coalition, the experience was both positive and enlightening. We cannot even begin to express our gratitude to the members of the BOA for the courtesy and respect they so generously accorded us, and we remain deeply moved by their sincere and very obvious concern for the quality of education Somerville is offering her young.

As in everything the Coalition has attempted to do, we have always been motivated by a firm belief that the schools were entitled to their fair share - and only a proportionately fair share - of monies available. Ear-marking is the essence of this belief, a belief in justice and equity in the budget process. But we readily acknowledge that even greater inequalities exist in the funding of public education statewide. Because Massachusetts, more than any other state, relies on the property tax to fund education, great disparity exists between the quality of educational services provided students in the Commonwealth's 351 cities and towns. Even before the advent of



COCHRAN!
"Two plus two? Well, like most questions facing our society today, there's no easy answer."

Proposition 2½ and the repeal of fiscal autonomy, the Somerville School Department was never overzealous in educational spending. With the significant expansion of Special Needs and Bilingual education, cities and towns were forced to absorb costs far exceeding federal and state reimbursement levels. That these programs were necessary then as now cannot be denied; that their costs significantly inflated the school budget also cannot be denied. But, even with the growth of these additional programs, Somerville was still well below the state average in per pupil spending.

(next page)

But until such time as these statewide disparities are successfully addressed through a major overhaul in the system of public school finance, we in Somerville must be concerned with equity on the local level. On Monday evening, March 21st, Superintendent of Schools Robert Watson formally presented the School Dept. budget for the 1983-1984 school year to members of the School Committee. At just over \$20M, this budget represents a \$1.5M increase over the present funding level; given the severe cutbacks under Prop 2½ and recent contractual agree-

ments, this increase is both understandable and necessary. It is incumbent upon all of us to support this budget and lobby strongly for its acceptance.

We must stop the continual erosion of our public school system; while our condition may not be terminal, it certainly warrants aggressive emergency treatment. Our wounds have far outgrown the band-aid approach of prior years. This budget will hopefully begin the healing process from the inside out, once more making Somerville's public schools a healthy place to learn and grow.



legislative alert

In FY'82, the Reagan Administration proposed \$11 billion in cuts to critical preventive children's and family support programs. The Congress enacted \$9 billion. In FY'83 the Administration proposed \$9 billion in cuts to these same programs. Congress enacted \$1 billion. In FY'84, the Reagan Administration proposes to "freeze" previous cuts and cut another \$3.5 billion from these same programs serving the same children and families just as they are being hit by the harsh effects of already enacted cuts.

A Children's Defense Fund (CDF)-inspired national lobbying effort aims this year to stop these Reagan proposals and to begin restoring Federal funds to children's services. The Office for Children and Mass. Advocacy Center fully support this effort. Our own Senators Kennedy and Tsongas are among those co-sponsoring "the Children's Survival Bill," H. 1603 and S. 572. At present, our Mass. delegation in the House of Representatives includes no co-sponsors.

Action needed: Write, call or telegram your Congressperson. Ask for support of the Children's Survival Bill (H.R. 1603). Increases in funding for key programs would total \$5.7 billion, but the bill would generate \$7 billion. Call the Council for Children at 623-5096 for more information.

Getting to Effective

In September 1981, the State Board of Education appointed a Task Force on Student Achievement and Effective Schools. The group was representative of parents, students, teachers, principals, school committees, superintendents, and business. The Task Force reviewed research on effective schools, heard the testimony of concerned citizens and developed recommendations to the State Board. Excerpts from the section of the Task Force report on effective schools is reprinted here. For more information about the full report, contact: Mass. Dept. of Education, Bureau of Student, Community and Adult Services, 1385 Hancock St., Quincy, MA 02169.

SUMMARY OF RESEARCH ON EFFECTIVE SCHOOLS

The Task Force reviewed current research on student performance and effective schools before developing its criteria and recommendations. The research emphasized characteristics of effective teachers and principals and the effects of school climate upon student performance. The following summary describes the type of research, the environment, the findings and implications.

"The Politics and Administration of Instructionally Effective Schools" was presented by Dr. Dale Mann, Columbia Teachers College, to the National Graduate Student Research Seminar in Educational Administration. He cited findings that "instructionally effective schools can override the learning related deficiencies ordinarily associated with low social class standing." The studies Mann examined compared lower economic inner city schools, identifying them as effective or ineffective. Mann then ascertained the following

characteristics of an effective school: strong principal leadership; teachers holding high expectations of their students; a school climate conducive to learning; an instructional emphasis on pupil acquisition of basic skills; frequent pupil evaluations linked to the next step in the lesson plan.

Fifteen Thousand Hours, by Michael Rutter, studied a population of low income inner city high schools in London, England. The study identified 13 student behaviors that schools, principals, teachers, and staff can use as indicators of a positive learning environment. These include: 1) not skipping school, 2) not skipping class, 3) little truancy, 4) wearing of school uniform (if any), 5) few school damages, 6) lack of graffiti, 7) low incidence of pupil violence, 8) few fights, 9) low rate of tardiness, 10) attention to task, 11) no conversation in class, 12) few instances of distractive behavior or 13) students yelling out in class.

Rutter notes positive effects of teachers' high expectations for students, the teaching style, management of the classroom, the school's climate and an equitable pattern of discipline; these essential characteristics decrease negative behaviors.

Ronald Edmonds, a leader in the research on effective schooling, supports and expands some of the above criteria. He emphasizes that all children are capable of being educated and that the behavior of school personnel is critical in determining the quality of education. His work described observations of effective and ineffective schools in low income and middle class communities: Edwards' findings indicate that both types of schools can be present in both types of communities, and he discusses why. Effective schools have strong administrative leadership; the school climate is conducive to learning; an atmosphere is created in which no child is permitted to fail; the emphasis is placed upon basic academic skills; frequent monitoring of student progress is maintained.

Dr. Gilbert Austin, University of Maryland, assisted in the "Process Evaluation, A Comprehensive Study of Outliers" conducted by the Maryland State Board of Education. The literature on successful schools was reviewed and those variables attributable to school success were separated. The variables are: strong principal leadership; high expectations placed on student and teacher performance; a greater range and variety of ex-

periences among principals, teachers and aides; satisfactory parent-teacher relationships.

Dr. John Goodlad, Dean of the UCLA Graduate School of Education, is completing a five year study, "A Study of Schooling"; it focused on 13 public elementary schools, 23 junior and senior high schools. Goodlad's findings suggest that tracking of students hurts educational opportunities; those who start out with the least satisfaction or success in school end up with the least satisfaction or success in life. Goodlad suggests a return to "somewhat old-fashioned practices," taking a heterogeneous class of students and working with all the students with the assumption that they are capable of learning. The teacher should hold high expectations for all his/her students. One of his most significant findings was that academic achievement is related to the amount of time the students spend in an instructional setting; considerable disparities among schools exist, and Goodlad urges school administrators to provide a full week of instruction and learning for all students. In addition, he stressed the need for better professional preparation for teachers and a re-examination of some of the assumptions about "poor" and "slow" learners.

...In summary, the Task Force was impressed with the similarity of research findings and their applicability to schools. Some criticisms of educational research main-

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Getting to Effective --

tain that the material repeats "what we already know", and this may be the case, but many practitioners in recent years have turned their attention to segments of the school or the curriculum. The research clearly makes them focus on the school as a place for learning and details the characteristics that makes this possible.



EFFECTIVE SCHOOL ORGANIZATION

The Task Force was charged with developing criteria and recommending procedures for recognizing effective schools - a task simplified by the research findings summarized in the previous section. (excerpts summarized. Ed.) The survey increased the Task Force members' understanding of the relationship of an effective instructional environment to a consistent set of practices. The members did not feel bound by the research and included

a criterion that addresses the role of the local district central office in making schools effective. This section lists criteria for the State Board to use in identifying outstanding schools and school programs; it also describes the procedures to be used to identify outstanding schools and school programs; it also describes the procedures to be used to identify effective schools and recommendations.

RECOMMENDED CRITERIA FOR EFFECTIVE SCHOOLS

1. *Central Office Leadership.* The school committee has the responsibility to provide support for effective school programs, expand efforts to obtain equitable funding for school programs and interpret to the public the goals of the district. The superintendent is the educational leader, responsible for the schools and to the community in which she or he works. The superintendent insures that the schools have effective administrative leadership primarily to support instruction, teachers who have high expectations for students, and ultimately, students whose achievement is more than satisfactory.

2. *Administrative Leadership.* Principals serve as instructional leaders and assist teachers to meet instructional goals. They articulate a philosophy of education, goals for the school and criteria for school programs. Faculty and administrators cooperate and assume

responsibility for creating an atmosphere conducive to learning.

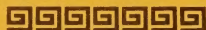
3. *School Environment.* Schools provide an environment conducive to learning that also makes students feel secure and supported. The schools are free of disruption and excessive noise; the building and grounds are clean, neat and in good repair. Classrooms are primarily places of learning, free from distraction.

4. *Classroom Management.* Teachers spend the greatest proportion of classroom time on substantive teaching, rather than on maintaining discipline or "housekeeping" details. Further, the largest segment of instructional time is devoted to teaching and learning the basic skills of reading, writing, and mathematics while not neglecting other subject areas as appropriate for the grade level. Homework is regularly assigned and examined, and the teachers evaluate the students frequently to determine if they are learning what is being taught. The students are informed of their progress, and the results are shared with parents.

5. *Expectations for Students.* Teachers and administrators believe that all students are capable of learning and expect them to learn. The instruction reflects this belief; the expectations are explicit and understood by students, parents, and the community. Schools have a system for monitoring and assessing pupil performance which is tied to

instructional objectives. Parents are familiar with the objectives and participate in their children's learning. Children with special needs and limited English are included in the total educational program of the school. Standards of student behavior are fair and demanding, not arbitrary; the standards are clearly stated and publicized.

6. *Student Performance.* An effective school, at minimum, is one in which students achieve the performance standards set for the basic skills (as defined in the Basic Skills Regulations). The performance of low achieving students will show improvement over time, and analysis of data will show this improvement.



YOU ARE INVITED to the next
Somerville Council for Children
Board meeting, Wednesday, April
13, 7:30 PM, at the Winter Hill
Community School, 115 Sycamore.

Somerville School Superintendent Robert Watson will be our guest speaker. This will be an opportunity to ask general questions about the Somerville school system, as well as to follow up on ideas presented at the public hearing on the school budget, to take place April 11th.

Please join us for an interesting and informative evening. For more information, call the Council at 623-5096.

HETEROGENEITY, DEMOCRACY, & WORLD CITIZENSHIP

We've been hearing a lot lately about heterogeneous grouping in our schools. The goal of this article is to bring out some of the positive byproducts of this experience for children.

The concept of heterogeneity aptly relates to children's clubs and out-of-school experiences as well. All the arguments against this grouping made (such as unfairly holding back "brighter" students and frustrating "slower" ones; imposing additional strains on already burdened teachers) may be valid in certain situations. But many feel that these problems can be worked out within the scope of heterogeneity, and that other factors (peer-tutoring, small group projects, smaller teacher-student ratios, etc.) more specifically address these questions. Also, while most subjects lend themselves to heterogeneous grouping, it is true that highly intensive subjects like advanced math or air conditioning repair, could best be served by grouping according to level.

SCHOOL RESPONSIBILITY

Heterogeneity -- or the grouping of students from a variety of levels, interests and backgrounds -- is the greatest opportunity we as adults can provide for our children to prepare them for living in our world. All will agree that the school experience has a major impact on the development of a person. What our children practice there

will do much to build their character. Therefore, if we see the school as a microcosm or miniature version of the world, then we must do all we can to facilitate their "trying on" different roles and encouraging their interaction with children, teachers, community volunteers -- all role-models -- who represent "the world". When our youth are among a variety of personalities, styles, ethnic-racial backgrounds, languages, socio-economic backgrounds, ages, interests, strengths, skills and persons with physical handicaps, their repertoire for relating to and respecting all people expands. Is there any better preparation for adulthood, for a culturally pluralistic society, and for any of a variety of life choices? The role of the schools cannot be underestimated here.

TRACKING

In today's school systems, all too often, by the time a student enters High School (and sometimes by the 5th grade!) he/she is well on their way to being tracked. To be "tracked" is to be steered in the direction of one field of study, to the exclusion of many others, based on some arbitrary criteria.

There is nothing more tragic than the loss of a self and all one could be. When a child's self-esteem, self-expectations and potential go down to the low rung of where one was placed by a "well-intentioned" teacher, parent or

even peer, then we can understand the adage that a great thunderstorm is a purging of God's and humanity's tears for a child.

Tracking appears to follow along socioeconomic lines and even reflect neighborhoods. It begins when a child is very young. One is put down both for being highly academically motivated or for going the "dummy" path of vocational or general studies. Even a sports hero, if primed only for the court or field, is tracked. These expectations continue throughout one's life.

NATURE OF HUMAN BEINGS

We could learn well from the positive aspects of the English settlement of North America, and Mao's China: each person is valued for their clear thinking, decision-making, and expression of feeling (through song, etc.), as well as for their physical labor and skills. Where we have progressed to in our society is that we dichotimize the two, so much so that even little children can be heard torturing one another with "stupid" or "sissy" for indulging in either! How well they have internalized the values of their elders!

As humans, we possess the potential for much higher and balanced knowledge and skills. Education is much broader than we have gotten used to. It includes self-reflection, conflict resolution, and interaction skills.

EDUCATION

The term education is in it-



self the key in fact. To "bring out" all there is in a person. Each person is unique and has special interests. Enough studies have demonstrated that the total growth of a person is essential for the well development in any one area. All youth have feelings, questions, challenges. If we are to exist as a society, then our priorities must be self-love, awareness, understanding, and respect and love of differences, along with problem-solving and other learning skills. Interaction in a democratic society and troubled world demands diversity at each and every grade level.

SIGNS OF OPTIMISM

The merger of our two high schools here in Somerville is a wonderful step. Curriculum should

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Heterogeneity --

follow suit, so that maximal opportunities exist for "cross-pathing" with fellow students. Through friendships, most of all, will we see the magnificent results.

(Rafael, who is engrossed with carpentry, meets Danielle, whose hobby is set design. Seeing them work together on a model, who would guess that Rafael has put little energy into his academic growth since his father's death and his family's needs for his care and support, or that Danielle is a top grade getter preparing for a science research career? Neither has been pigeon-holed; both have their options open. In today's world, however, they might not have even met!)

OUR URBAN GIFTS

The tables are already turning to the situation of our suburban and rural counterparts truly envying our young people's experiential background to move in many circles responsibly and with confidence. Even the highest scholastic merits and attainment of "culture" pale next to a vibrant, well-rounded person.

Let us give the gift of heterogeneity to our children so they can truly succeed in this world. Heterogeneity need never be a threat to educational advancement. Tracking hurts all of us in the end. We have given all too little attention to the impact of



group interaction and dynamics in our schools and the resiliency it builds into our nation and world. Heterogeneity is our best gift to our children.



Dora Kalajian is the Director of the Ethnic Arts Center, Somerville's own Anthropology Education center, whose model rests on its diverse membership -- across age, sex, class, family style, racial and ethnic lines. Her experience is first hand, in that she went through the Somerville Public Schools, and was even told by a Guidance Counselor in the 10th grade that she wasn't "college material".

To contact the Ethnic Arts Center, call 628-5800.

UPDATE: EPH GROUPWORK PROGRAM

The planning is now well underway for the 11th year of the Somerville Community Day Camp, a program of the Elizabeth Peabody House. As in previous years, we will run two sessions (July and August), 4 weeks in length, Monday through Thursday from 9-3 PM. The camp sites will be located at East Somerville Community School and Lincoln Park Community Schools the first session, and Lincoln Park and Winter Hill Community Schools the second session. Applications will be sent to Day Camp users from last year early in May. They will have a two week pre-registration period. All others may apply after that on a first-come, first-serve basis. The fee is on a moderate sliding scale and the camp is open to Somerville children, ages 6 -12. We will be offering a wide variety of activities, Family Nights once per session, and as many field trips as possible. We'll keep you posted on where you can pick up an application, dates and other information.

* * * * *

We will be starting a very exciting Drama Group for people ages 14 on up. The group will be co-led by Mary Pat Glynn, who has had a lot of experience in Drama and Theater Education. Group members will choose a topic, write the script and be the actors and actresses. The topic will be something you're interested in and care about. You'll learn the

basics of drama and different ways of expressing yourself. The group will be held on Saturdays from 11-1 for ten weeks and the cost is 50¢ per class. Call Maris at 623-5510 to register.

* * * * *

Due to popular demand, we are extending our Friday morning Women's Exercise Groups for another 3 months. We can still sign up a few people in each group. The young adult Women's Group meets from 10-11, and child care is provided. The older adult Women's Group meets from 11-12. The class is a blend of exercise, dance and some aerobics all done to music. The cost is 75¢ per class, and child care and refreshments are provided.

* * * * *

The Activities Club for Boys and Girls, ages 11-13, began in February and will continue for 10 weeks. We plan to keep the group going during the summer, when new people can join. The group currently meets from 3-5 each Tuesday and activities include bowling, games, video, movies and other projects. The cost is 25¢ per group and refreshments and fun are provided.

For any information/questions on the above, call Maris at 623-5510.





Celebrate OFC's 10th!



The Children's Museum will help kick off the celebration of the Office for Children's Tenth Anniversary, with a display in its Parents' Resource Room, from April 17th to April 30th. The display will highlight the unheralded work of the Councils for Children throughout the state. In addition, a slide presentation will inform parents of the danger of lead poisoning in children and its prevention.

The Children's Museum offers free admission to groups of children from schools, day care centers, family day care homes, informal neighborhood groups, etc. However, arrangements must be made in advance for a group visit. Call 426-6500 and ask for reservations.

Have your kids visit the Children's Museum this year during the Office for Children's Tenth Anniversary!

NO KIDDING is published the first week of the month, and includes news, announcements and opinions relating to the youth of Somerville. Letters, articles and announcements are welcome - submit to: NO KIDDING, 1 Summer St., Somerville 02143. Call 623-5096 if you would like to be placed on the mailing list. Editorial content is reviewed and approved by the Council's Steering Committee. Printing is done by Pronto Print, 876-6098.

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